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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 15:29:05 ON 29 JAN 2005
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FILE COVERS 1907 - 29 Jan 2005  VOL 142 ISS 6
FILE LAST UPDATED: 27 Jan 2005  (20050127/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

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L27             STR
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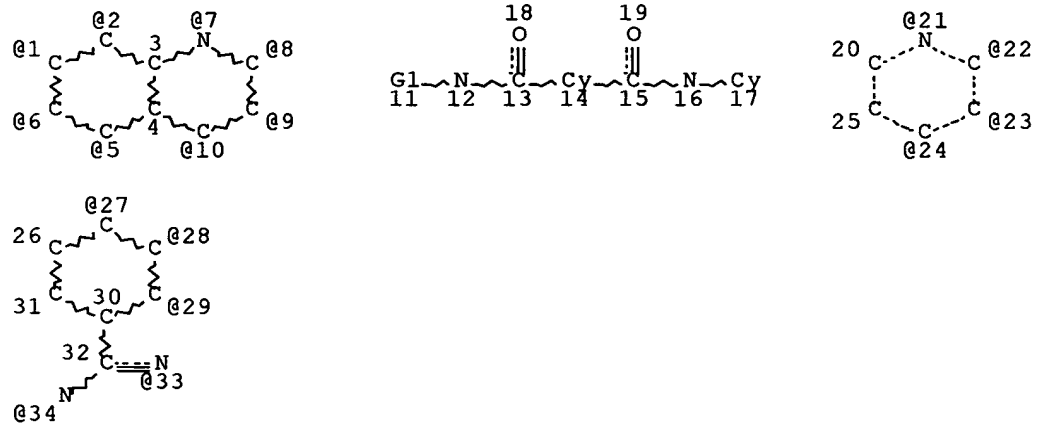


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DEFAULT ECLEVEL IS LIMITED

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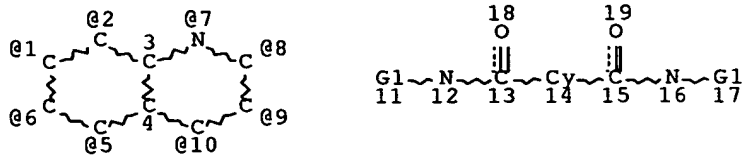

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STEREO ATTRIBUTES: NONE
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L38 24 SEA FILE=HCAPLUS ABB=ON PLU=ON L37
L39 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 NOT BOUCHARD?/AU

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=> d ibib abs hitstr l39 1-22

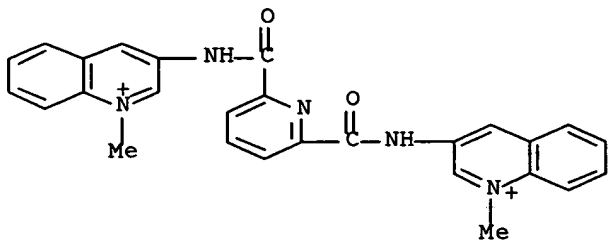
L39 ANSWER 1 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:776482 HCAPLUS Full-text
DOCUMENT NUMBER: 142:1569
TITLE: Stabilization of the c-myc gene promoter quadruplex by specific ligands' inhibitors of telomerase
AUTHOR(S): Lemarteleur, Thibault; Gomez, Dennis; Paterski, Rajaa; Mandine, Eliane; Mailliet, Patrick; Riou, Jean-Francois
CORPORATE SOURCE: Laboratoire d'Onco-Pharmacologie, UFR de Pharmacie, Universite de Reims Champagne-Ardenne, Reims, 51096, Fr.
SOURCE: Biochemical and Biophysical Research Communications (2004), 323(3), 802-808
CODEN: BBRCA9; ISSN: 0006-291X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A parallel G-quadruplex structure was recently identified in the NHE III1 element of the c-myc gene promoter that functioned as a transcriptional repressor. Different series of telomeric G-quadruplex interacting ligands reported to block telomerase activity were evaluated in a new PCR stop assay on the c-myc quadruplex (Pu22myc). Results indicated that the cationic porphyrin TMPyP4 previously described to stabilize c-myc quadruplex and to cause transcription inhibition efficiently inhibited the assay but with a narrow selectivity when parallel expts. were performed with an oligonucleotide (Pu22mu) containing mutations in the guanine repeat which is unable to form a quadruplex. Other ligands presented potent inhibitory properties with IC50 in the submicromolar range. 307A, a new 2,6-pyridin-dicarboxamide derivative was found to present the highest selectivity as compared to Pu22mu oligonucleotide (>90-fold). Comparison with telomeric G-quadruplex using TRAP-G4 and PCR stop assays also indicated that ligands 307A, telomestatin, and TMPyP4 are equipotent against both c-myc and telomeric sequences while other ligands displayed some partial selectivity (2- to 6-fold) towards one of

these sequences. This work provides evidence that G-quadruplex ligands reported as telomerase inhibitors efficiently stabilized c-myc promoter intramol. quadruplex and may also potentially be used to inhibit c-myc gene transcription in tumor cells.

IT **794458-56-3**, 307A
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(stabilization of c-myc gene promoter quadruplex by specific ligands' inhibitors of telomerase)

RN 794458-56-3 HCAPLUS

CN Quinolinium, 3,3'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L39 ANSWER 2 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:566908 HCAPLUS Full-text

DOCUMENT NUMBER: 141:260514

TITLE: Design of an Inversion Center between Two Helical Segments

AUTHOR(S): Maurizot, Victor; Dolain, Christel; Leydet, Yoann; Leger, Jean-Michel; Guionneau, Philippe; Huc, Ivan

CORPORATE SOURCE: Institut Europeen de Chimie et Biologie, Pessac, 33607, Fr.

SOURCE: Journal of the American Chemical Society (2004), 126(32), 10049-10052
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

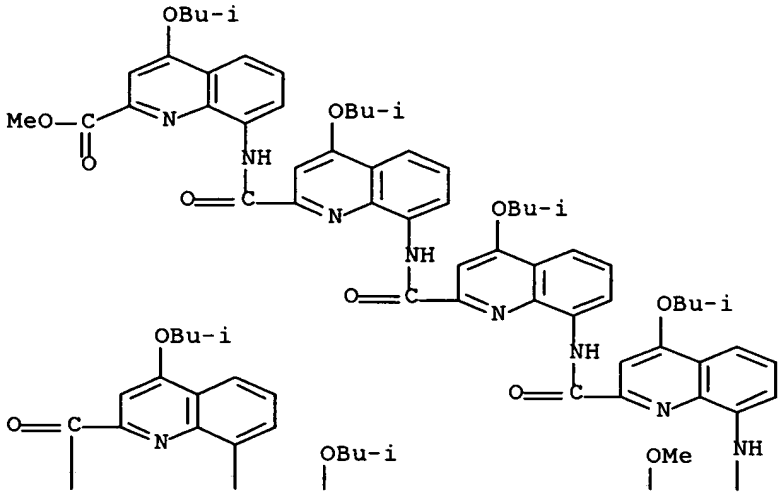
AB A new strategy is proposed to control the relative orientation of two folded helical oligomers in such a way that they diverge from an aromatic linker and have opposite helical handedness. Mutual steric exclusion between the two helixes results from the fact that they cannot be at the same time folded and on the same side of the linker. The concept is validated using the helical conformations of oligoamides of 8-amino-2-quinolinecarboxylic acid, but it should be applicable to many families of oligomers and leads to the first designed meso-helixes.

IT **754216-32-5P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(crystal structure; preparation and crystal structure of oligoamides of amino-quinolinecarboxylic acid with an inversion center between two helical segments)

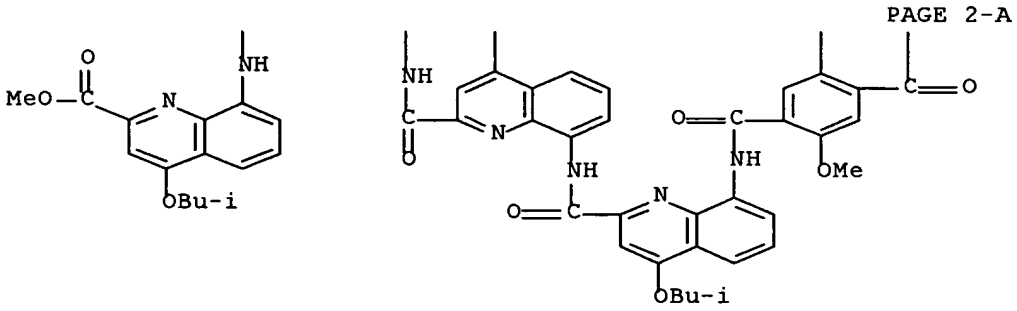
RN 754216-32-5 HCAPLUS

CN 2-Quinolinecarboxylic acid, 8,8'-[(2,5-dimethoxy-1,4-phenylene)bis[carbonylimino[4-(2-methylpropoxy)-8,2-quinolinediyl]carbonylimino[4-(2-methylpropoxy)-8,2-quinolinediyl]carbonylimino[4-(2-methylpropoxy)-8,2-quinolinediyl]carbonylimino]]bis[4-(2-methylpropoxy)-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



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L39 ANSWER 3 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:407940 HCAPLUS Full-text
DOCUMENT NUMBER: 137:212419
TITLE: Reversal of polyamine selectivity for DNA and RNA by steric hindrance
AUTHOR(S): Lomadze, Nino; Schneider, Hans-Jorg
CORPORATE SOURCE: FR 11.2 Organische Chemie der Universitat des Saarlandes, Saarbrucken, D-66041, Germany
SOURCE: Tetrahedron Letters (2002), 43(24), 4403-4405
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The polyamines known until today generally bind better to double-stranded RNA than to DNA, as shown in significantly higher m.p. increases with RNA. We report that large and bulky polyamines with three or four pos. charged nitrogen centers connected via flexible or rigid linkers to either a benzene or an adamantane core show high affinities and are large enough to exhibit a strong preference for double-

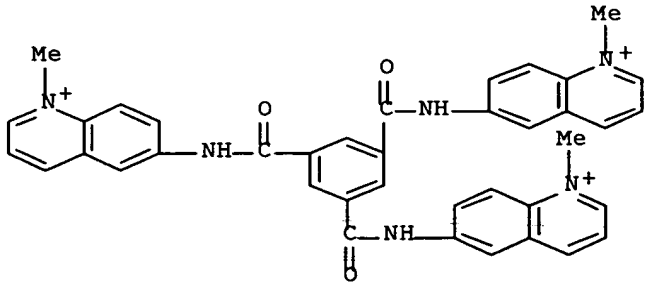
stranded DNA (polydApolydT) in comparison to RNA (polyApolyU), which differs by its smaller and deeper groove.

IT **457646-83-2**

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(bulky polyamines exhibit higher affinity for DNA than RNA due to steric hindrance of bulky groups of polyamines)

RN 457646-83-2 HCAPLUS

CN Quinolinium, 6,6',6''-[1,3,5-benzenetriyltris(carbonylimino)]tris[1-methyl-(9CI) (CA INDEX NAME)



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L39 ANSWER 4 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:512965 HCAPLUS Full-text

DOCUMENT NUMBER: 129:239452

TITLE: Molecular modeling and footprinting studies of DNA minor groove binders: bisquaternary ammonium heterocyclic compounds

AUTHOR(S): Slickers, P.; Hillebrand, M.; Kittler, L.; Lober, G.; Suhnel, J.

CORPORATE SOURCE: Inst. Mol. Biotechnol., Jena, D-07708, Germany

SOURCE: Anti-Cancer Drug Design (1998), 13(5), 463-488
CODEN: ACDDEA; ISSN: 0266-9536

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors report new quant. footprinting data which reveal differences in binding consts. of bisquaternary ammonium heterocyclic compds. (BQA) with AT-rich DNA sites depending on the ligand structure and on the size and sequence of the DNA binding site. To understand the dependence of binding affinity on the ligand structure the authors have performed quantum-chemical AM1 calcns. on the BQA compds. and on subunits to explore the conformational space and to calculate the electronic and structural features of individual ligand conformations. Due to the properties of the rotatable backbone bonds, there is a large number of possible conformations with almost equal energy. The authors present a new method for the calcn. of the radius of curvature of mol. structures. Assuming that strong binders should have a shape complementary to the DNA minor groove, this measure is used to select the optimum conformations for DNA-drug binding. The approach yields the correct ligand conformation for SN6999, for which an x-ray DNA-drug structure is known. The curvature of the optimum conformations of all ligands is compared with the exptl. binding consts. A correlation is found between curvature and binding constant provided other structural factors do not vary. Therefore, the authors conclude that within structurally similar BQA compds., the extent of curvature is the relevant quantity which modulates the binding affinity.

IT **14120-88-8**, SN4094

RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(mol. modeling and footprinting studies of DNA minor groove binders using bisquaternary ammonium heterocyclic compds.)

RN 14120-88-8 HCAPLUS

CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

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CRN 16722-51-3
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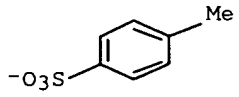

CM 2

CRN 14106-77-5
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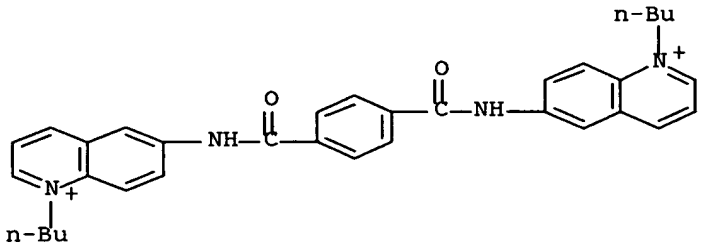

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L39 ANSWER 5 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:298609 HCAPLUS Full-text
DOCUMENT NUMBER: 129:1388
TITLE: Sequence specific modulation of DNA restriction enzyme cleavage by minor groove binders
AUTHOR(S): Kittler, Leonhard; Bell, Achim; Baguley, Bruce C.; Loeber, Guenter
CORPORATE SOURCE: Institut Molekulare Biotechnologie e.V., Jena, D-07745, Germany
SOURCE: Biological Chemistry (1998), 379(4/5), 519-525
CODEN: BICHF3; ISSN: 1431-6730
PUBLISHER: Walter de Gruyter & Co.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The inhibition of restriction endonuclease cleavage by a series of bisquaternary ammonium derivs. (BQA-derivs.) which bind to the minor groove of DNA was studied. The derivs. considered included 6 sequence-selective binders (SN 6570, SN 6999, SN 6050, SN 6132, SN 6131, and SN 18071) and 4 non-specific binders (SN 6113, SN 5754, SN 6324, and SN 4094) and can be distinguished by their activity on restriction

endonucleases. Digestion expts. with pUC19 DNA were monitored electrophoretically using the transition of the covalently closed circular (ccc) DNA into the linear double stranded (lds) one. Only the sequence-specific binders inhibit the cleavage activity of restriction endonucleases EcoRI, SspI and DraI with 4 and 6 dAdT-base pairs within their restriction sites, while the activity of SalI and BamHI with less than 4 dAdT-sequences was unaffected. In contrast, the non-specific binding ligands were incapable of suppressing enzyme digestion. The inhibition of the restriction endonuclease PvuII indicates that ligand binding in close vicinity to the cleavage sites is also involved in the enzyme inhibition. The dAdT-content in proximity to the palindromic sequences of 3 DraI cutting sites in pUC19 DNA explains why the derivative SN 6053 protects these sequences in different manners. Gel shift expts. indicated that BQA-derivs. inhibit the DNA-enzyme complex formation if the ligand was added to the DNA before the enzyme. In contrast, complex formation between DNA and enzyme remained unchanged when the enzyme was added 1st.

IT **14120-88-8**, SN 4094
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(sequence specific modulation of DNA restriction enzyme cleavage by minor groove binding bisquaternary ammonium derivs.)

RN 14120-88-8 HCAPLUS

CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

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CRN 16722-51-3
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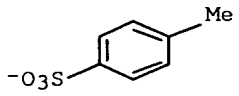

CM 2

CRN 14106-77-5
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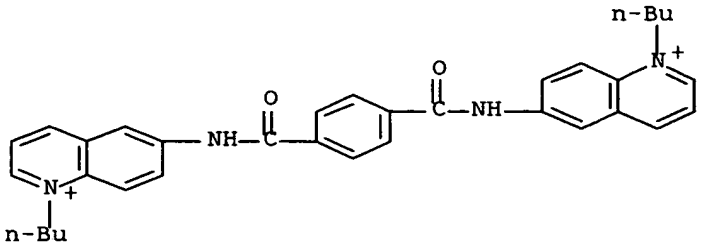


L39 ANSWER 6 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:154908 HCAPLUS Full-text
DOCUMENT NUMBER: 128:237185
TITLE: Silver halide photographic material and processing thereof
INVENTOR(S): Takizawa, Hiroo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 74 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

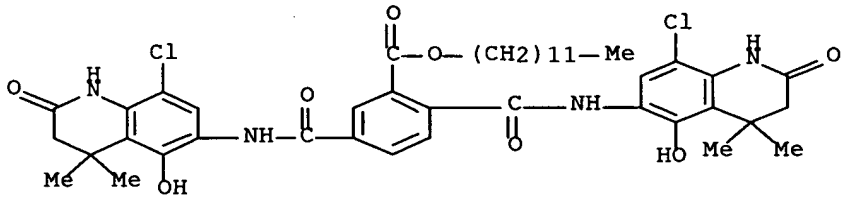
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10062896	A2	19980306	JP 1996-232629	19960815

PRIORITY APPLN. INFO.: JP 1996-232629 19960815

AB The title material possesses, on a support, ≥1 photog. constitutive layers ≥1 of which contains a color developing agent R11NHNHXR12 [R11 = aryl or heterocycle; R12 = alkyl, alkenyl, alkynyl, aryl, heterocycle; X = SO2, CO, COCO, CO2, CONR13, COCO2, COCONR13, SO2NR13; R13 = H, alkyl, alkenyl, alkynyl, aryl, heterocycle] and ≥1 dye-forming coupler selected from C1M1aD1M2bC2, C1M1aD1M2bC2M3cD2M4dC3, and C1M1aE(M2bC2)(M3cC3) [C1-3 = coupler residue forming a dye upon coupling with the oxidized product of the above developing agent; M1-4 = O, CO2, CO, NR70, CONR70, NR70CONR71, OCONR70, SO2NR70, NR70SO2NR71, P(:O)OR70NR71, P(:O)R70NR71 (R70, R71 = H, alkyl, alkenyl, cycloalkyl, aryl), S, SO, SO2; a, b, c, d = 0 or 1; D1, D2 = divalent linking group; E = trivalent linking group]. The material is heat-developed at 50-200° or developed in a solution to form an image. The material shows good coloring properties upon development and provides high color quality images with high d. and sharpness even when used couplers having a substituent in its active position.

IT **204757-53-9**
RL: TEM (Technical or engineered material use); USES (Uses)
(photog. film containing hydrazine derivative color developer and color-forming coupler)

RN 204757-53-9 HCAPLUS
CN Benzoic acid, 2,5-bis[[(8-chloro-1,2,3,4-tetrahydro-5-hydroxy-4,4-dimethyl-2-oxo-6-quinolinyl)amino]carbonyl]-, dodecyl ester (9CI) (CA INDEX NAME)



L39 ANSWER 7 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:636162 HCAPLUS Full-text
DOCUMENT NUMBER: 125:321371
TITLE: Inhibition of restriction endonucleases by DNA sequence-reading ligands
AUTHOR(S): Kittler, L.; Bell, A.; Baguley, B. C.; Loeber, G.
CORPORATE SOURCE: Inst. Molekulare Biotechnologie e.V., Jena, D-07745, Germany
SOURCE: Biochemistry and Molecular Biology International (1996), 40(2), 263-272
CODEN: BMBIES; ISSN: 1039-9712
PUBLISHER: Academic
DOCUMENT TYPE: Journal
LANGUAGE: English

AB DNA sequence-reading bisquaternary ammonium heterocycles SN 6570, SN 6999, SN 6053, SN 6132, SN 6131, SN 18071 and the non-specific binders SN 6113, SN 5754, SN 6324, and SN 4094 influence the enzymic activity of restriction endonucleases in different manners. A prerequisite for sequence-specific ligand interaction is a dAdT run of at least four base pairs. The sequence-specific binders inhibit the cleavage activity of restriction endonucleases EcoRI, SspI, and DraI with four and six dAdT base pairs in their restriction sites, while the activity of SalI and BamHI with less than four dAdT base pairs in their recognition motifs remains unaffected. On the contrary, the non-specific binding DNA ligands are incapable of suppressing the digestion for restriction nucleases under research. These results are in line with our footprint data. The inhibitory effect is independent of the number of cleavage sites in DNA and of whether the macromols. exists in the ccc or lds conformation. Sequence specific binding of the ligand SN 6053 in close vicinity to the cleavage sites of restriction endonuclease DraI also interferes with enzyme inhibition.

IT **14120-88-8**, SN 4094
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(inhibition of restriction endonucleases by DNA sequence-reading ligands)

RN 14120-88-8 HCAPLUS

CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

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CRN 16722-51-3
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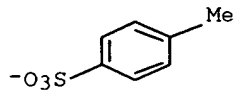

CM 2

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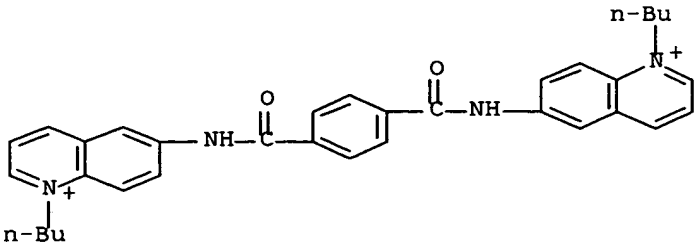

L39 ANSWER 8 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:320977 HCAPLUS Full-text
DOCUMENT NUMBER: 125:10846
TITLE: Preparation of 1,4-bis(ureidoalkyl)cyclohexane or -piperazine derivatives as acyl coenzyme A:cholesterol

acyltransferase inhibitors and antioxidants

INVENTOR(S): Sueda, Noryoshi; Yamada, Kazuhiko; Miura, Katsutoshi; Kinoshita, Nobusuke; Hiramoto, Shigeru; Katsuyama, Koichi; Tsukada, Yoko

PATENT ASSIGNEE(S): Nisshin Flour Milling Co, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08041006	A2	19960213	JP 1994-184380	19940805

PRIORITY APPLN. INFO.: JP 1994-184380 19940805

OTHER SOURCE(S): MARPAT 125:10846

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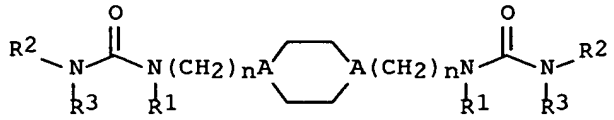

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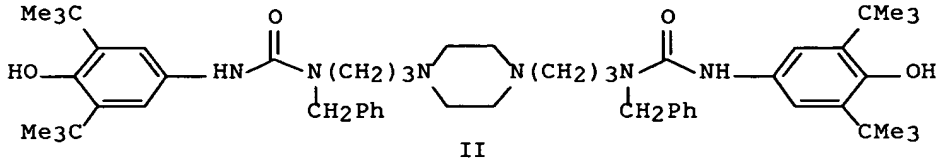


II

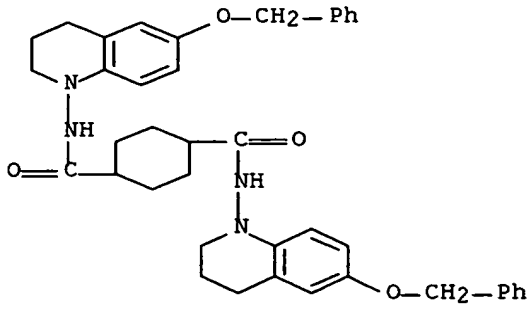
AB The title compds. [I; R1 = H, C1-6 alkyl, phenyl-C1-6 alkyl, 3,5-di-tert-butyl-4-hydroxybenzyl; R2, R3 = H, C1-12 alkyl, geranyl, C3-12 cycloalkyl, di-C1-6 alkylamino-C1-6 alkyl, (un)substituted Ph, 3,5-di-tert-butyl-4-hydroxybenzyl, 5-oxo-1-phenylpyrazolinyl, 3-methyl-5-oxo-1-phenylpyrazolinyl, pyridyl; or NR2R3 = hydroxy-1,2,3,4-tetrahydroquinolyl, 6-ethoxy-2,2,4-trimethyl-1,2,3,4-tetrahydroquinolyl; A = CH, N], which protect low d. lipoproteins (LDL) from oxidative alterations, and are useful as hypocholesteremics and antiarteriosclerotics, are prepared Thus, a solution of 1.50 g 3,5-di-tert-butyl-4-hydroxybenzoic acid in 20 mL toluene was treated 0.67 g Et3N and 1.73 g (PhO)2P(O)N3, stirred at room temperature for 3 h,heated at 80-90° with stirring, cooled to ≤0°, treated dropwise with a solution of 1.14 g 1,4-bis[3-(benzylamino)propyl]piperazine in toluene, and stirred overnight while gradually warmed to room temperature to give, after silica gel chromatog., the title compound (II) in 13% yield. II.HCl in vitro inhibited acyl CoA:cholesterol acyltransferase prepared from rabbit's liver microsome fractions by 87% at 10-6 M (assay described by Kazuichi Natori in Japan I. pharmacol., 1986) in and inhibited the formation of malonaldehyde in human LDL in the presence of CuSO4 by 99% at 5 + 10-6 M (assay described by Simon J.T. Mao in J. Med. Chem, 1991). A granule formulation containing II was described.

IT **176905-88-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of bis(ureidoalkyl)cyclohexane or -piperazine derivs. as acyl CoA:cholesterol acyltransferase inhibitors and antioxidants)

RN 176905-88-7 HCAPLUS

CN 1,4-Cyclohexanedicarboxamide, N,N'-bis[3,4-dihydro-6-(phenylmethoxy)-1(2H)-

quinolinyl]- (9CI) (CA INDEX NAME)



L39 ANSWER 9 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:319811 HCAPLUS Full-text
DOCUMENT NUMBER: 125:48533
TITLE: Sequence-specific binding of antitumor bisquaternary ammonium heterocycles to DNA and inhibition of polymerase activity in vitro
AUTHOR(S): Kittler, L.; Waehnert, U.; Bauguley, B. C.; Bailly, C.; Waring, M. J.; Loeber, G.
CORPORATE SOURCE: Inst. Molekulare Biotechnol., Univ. of Auckland Med. Sch., Auckland, N. Z.
SOURCE: Anti-Cancer Drug Design (1996), 11(2), 101-115
CODEN: ACDDEA; ISSN: 0266-9536
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

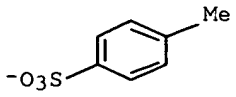
AB Ten bisquaternary ammonium heterocycles (BQA) active against exptl. tumors were investigated for possible sequence-selective binding to DNA. Footprinting analyses indicated that several bond preferentially to dAdt runs consisting of at least four base pairs. Shortening of one or two spacer groups between the aromatic rings of the ligands (by replacement of CONH with NH) emerged as a prerequisite for sequence-specific binding. Other relevant factors concerned the overall shape of the ligands and the relative position of their pos. charges. Footprinting plots evaluated for the BQA compound SN 6132 on the 167mer EcolRI-RsaI restriction fragment from plasmid pBR322 yielded the highest individual binding constant for the sym. base sequence AATTTAA, with approx. KA=2.0+106/M. Polymerase-catalyzed synthesis of DNA and RNA in vitro were inhibited by all BQA derivs., but the inhibition was much more pronounced with the sequence-specific binders SN 6999 and SN 6132 than with the non-specific ligand SN 6113.

IT **14120-88-8**, SN 4094
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sequence-specific binding of antitumor bisquaternary ammonium heterocycles to DNA and inhibition of polymerase activity in vitro)

RN 14120-88-8 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

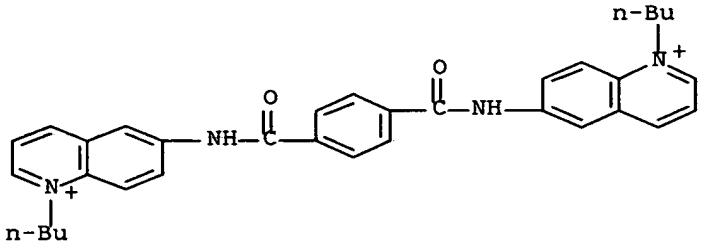
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

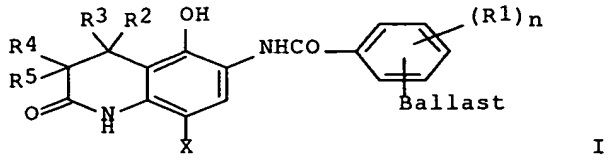
CRN 14106-77-5
CMF C34 H36 N4 O2



L39 ANSWER 10 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:123665 HCAPLUS Full-text
DOCUMENT NUMBER: 124:160548
TITLE: Color filter for display devices and its manufacture using silver halide emulsions
INVENTOR(S): Hirai, Hiroyuki; Sato, Kozo
PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07294714	A2	19951110	JP 1994-84315	19940422
JP 3356872	B2	20021216		
PRIORITY APPLN. INFO.:			JP 1994-84315	19940422

GI



I

AB In the title filter manufactured by (1) pattern-wise-exposing a photosensitive material comprised of an optically transparent substrate and ≥3 Ag halide emulsion

layers containing cyan, magenta, and/or yellow couplers, (2) color developing, (3) bleach-fixing, and (4) washing, the cyan coupler is represented by I (R1 = halo, alkyl, alkoxy, acylamino, carbamoyl; n = 0-4; R2, R3 = alkyl, aryl; R4, R5 = H, alkyl; X = H, group capable of leaving upon oxidative coupling reaction with developing agent; Ballast = non-diffusing group with ≥12 carbons).

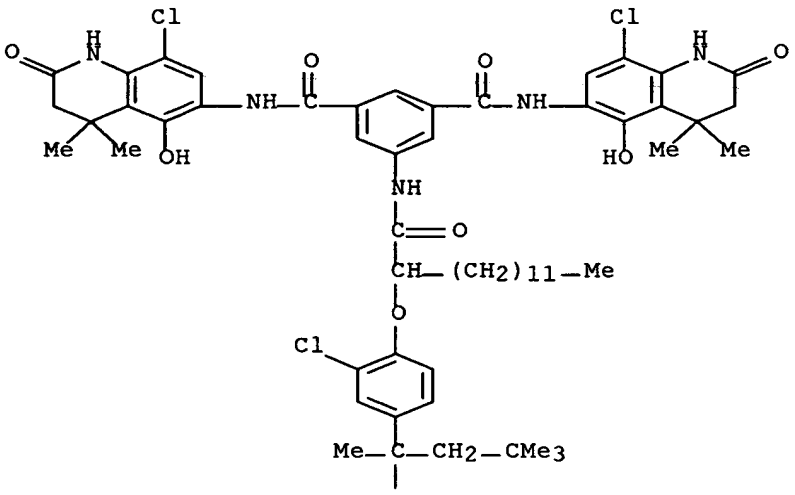
IT **173731-60-7**

RL: DEV (Device component use); USES (Uses)
(cyan coupler; color filter for display devices and its manufacture using silver halide emulsions)

RN 173731-60-7 HCAPLUS

CN 1,3-Benzenedicarboxamide, N,N'-bis(8-chloro-1,2,3,4-tetrahydro-5-hydroxy-4,4-dimethyl-2-oxo-6-quinolinyl)-5-[[2-[2-chloro-4-(1,1,3,3-tetramethylbutyl)phenoxy]-1-oxotetradecyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

Me

L39 ANSWER 11 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:163996 HCAPLUS Full-text

DOCUMENT NUMBER: 120:163996

TITLE: Preparation of bisamineimides containing quinolinium or pyridinium cations

INVENTOR(S): Maruyama, Koji

PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

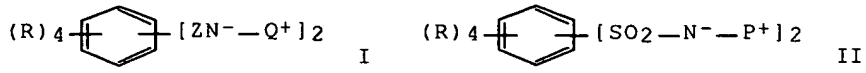
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 05279335	A2	19931026	JP 1992-79982	19920401
PRIORITY APPLN. INFO.:			JP 1992-79982	19920401
OTHER SOURCE(S):	CASREACT 120:163996; MARPAT 120:163996			

GI



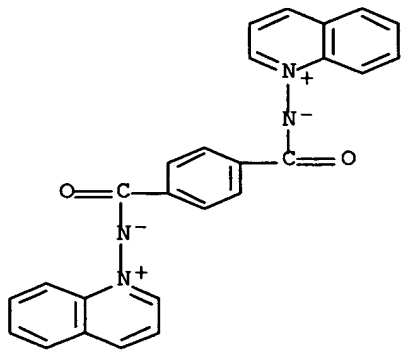
I II

AB The title compds. [I and II; Z = CO, SO2; R = H, C1-6 alkyl; Q+ = (un)substituted quinolinium cation] and P+N-CONH-R1-NHCON-P+ [III; R1 = C1-15 bivalent hydrocarbon group; P+ = (un)substituted pyridinium cation], useful as photocrosslinking agents which provide photosensitive resin compns. having excellent storage stability, without discoloration of resins during hardening, and with good heat resistance for the photocured resins, are prepared I are prepared by reaction of (un)substituted quinolines with aminating agents and reaction of the resulting 1-aminoquinolinium salts with aromatic dicarboxylic acids, disulfonic acids, or their reactive derivs. II and III are prepared by reaction of (un)substituted pyridine with aminating agents and reaction of the resulting 1-aminopyridinium salts with aromatic disulfonic acids and diisocyanates, resp. Thus, quinoline was stirred with O-(mesitylenesulfonyl)hydroxylamine in CH2Cl2 at room temperature to give N-aminoquinolinium mesitylenesulfonate, which was stirred with terephthaloyl chloride in MeCN containing Et3N at room temperature overnight to give 85% N,N'-bis(1-quinoliniumyl)terephthalimide.

IT **153143-26-1P**, N,N'-Bis(1-quinoliniumyl)terephthalimide
153143-27-2P, N,N'-Bis(1-quinoliniumyl)isophthalimide
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as photocrosslinking agent)

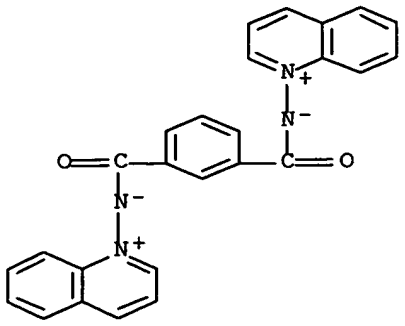
RN 153143-26-1 HCAPLUS

CN Quinolinium, 1,1'-[1,4-phenylenebis(carbonylimino)]bis-, bis(inner salt) (9CI) (CA INDEX NAME)

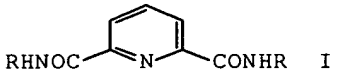


RN 153143-27-2 HCAPLUS

CN Quinolinium, 1,1'-[1,3-phenylenebis(carbonylimino)]bis-, bis(inner salt) (9CI) (CA INDEX NAME)



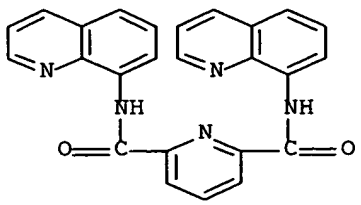
L39 ANSWER 12 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:143077 HCAPLUS Full-text
DOCUMENT NUMBER: 114:143077
TITLE: 2,6-Bis[N-(8-quinolyl)carbamoyl]pyridine as a highly selective extractant for copper(II)
AUTHOR(S): Hiratani, Kazuhisa; Taguchi, Kazuhiro
CORPORATE SOURCE: Ind. Prod. Res. Inst., Tsukuba, 305, Japan
SOURCE: Bulletin of the Chemical Society of Japan (1990), 63(11), 3331-3
CODEN: BCSJA8; ISSN: 0009-2673
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 114:143077
GI



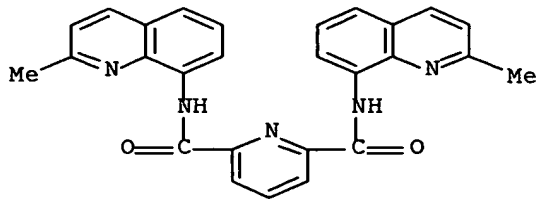
AB Title compds. I (R = 8-quinolinyl, 1-naphthyl, 2-methyl-8-quinolinyl, 2-pyridylmethyl) were prepared from 2,6-pyridinedicarbonyl chloride and amines for heavy metal ion-chelation. It was shown in solvent extraction that I (R = 8-quinolinyl) can extract only Cu(II) with excellent selectivity and efficiency from the aqueous phase (pH 6.2) containing Cu(II), Ni(II), Co(II), and Zn(II) into the chloroform phase.

IT **132734-56-6P 132734-82-8P 132734-83-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and selective copper extraction by)

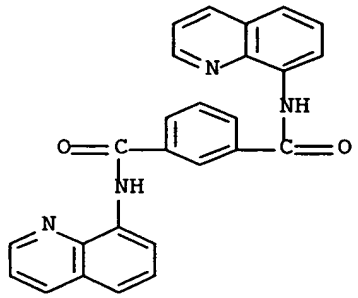
RN 132734-56-6 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N,N'-di-8-quinolinyl- (9CI) (CA INDEX NAME)



RN 132734-82-8 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N,N'-bis(2-methyl-8-quinolinyl)- (9CI) (CA INDEX NAME)



RN 132734-83-9 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-di-8-quinolinyl- (9CI) (CA INDEX NAME)



L39 ANSWER 13 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1990:48352 HCAPLUS Full-text
DOCUMENT NUMBER: 112:48352
TITLE: Localization of a nonintercalative DNA binding antitumor drug in mitochondria: relationship to multidrug resistance
AUTHOR(S): Liley, David T. J.; Wiggins, Philippa M.; Baguley, Bruce C.
CORPORATE SOURCE: Sch. Med., Univ. Auckland, Auckland, N. Z.
SOURCE: European Journal of Cancer & Clinical Oncology (1989), 25(9), 1287-93
CODEN: EJCODS; ISSN: 0277-5379
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The bis-(n-butyl) quaternary salt of N,N'-bis-(6-quinolyl)terephthalamide (QBQ), a fluorescent antitumor compound in the phthalanilide series which is thought to bind to the minor groove of the DNA double helix, has been investigated with respect to its in vitro activity and subcellular localization. Cultured MCF-7 human breast carcinoma cells concentrated QBQ in mitochondria by a time-dependent process which was inhibited by the ionophore valinomycin, suggesting a possible mode of antitumor action of QBQ through mitochondrial poisoning. Growth of cultured P388 murine leukemia cells was inhibited 50% in the presence of 0.52 μM QBQ, and multidrug-resistant P388 sublines developed for resistance to actinomycin D, vincristine, Adriamycin and the phthalanilide NSC 38280 were cross-resistant to the drug. Cross-

resistance was reduced in all lines by the presence of 11 μM verapamil, suggesting that a transport resistance mechanism operates on QBQ. The actinomycin D-resistant P388 cell line was found to be cross-resistant to the aromatic cations rhodamine 123, which binds to proteins, and ethidium and pyronin Y, which bind intercalatively to DNA. Thus, mitochondrion-specific drugs with different macromol. binding properties all appear to be excluded by multidrug-resistant cells.

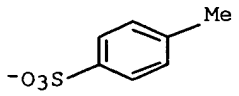
IT **14120-88-8**
RL: BIOL (Biological study)
(cytotoxicity and mitochondrial localization of, multidrug resistance in relation to, in human and laboratory animal cells)

RN 14120-88-8 HCAPLUS

CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

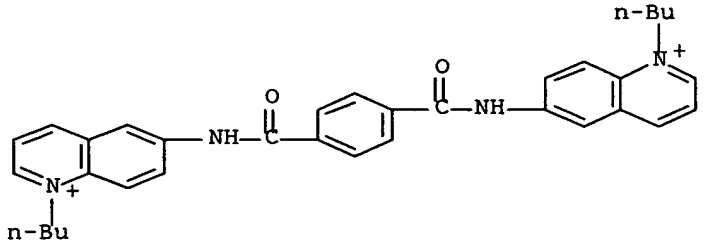
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

CRN 14106-77-5
CMF C34 H36 N4 O2



L39 ANSWER 14 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:602110 HCAPLUS Full-text

DOCUMENT NUMBER: 105:202110

TITLE: Coordination polymers of N,N'-bis(8-hydroxy-5-quinolinyl)terephthalamide

AUTHOR(S): Patel, Ravji D.

CORPORATE SOURCE: Chem. Dep., Sardar Patel Univ., Vallabh Vidyanagar, 388 120, India

SOURCE: Makromolekulare Chemie (1986), 187(8), 1871-5
CODEN: MACEAK; ISSN: 0025-116X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB [ML]n (M = Fe, Co, Ni, Cu, Zn; H2L = N,N'-bis(8-hydroxy-5-quinolinyl)terephthalamide) were prepared The complexes were characterized by elemental analyses, IR spectra, electronic reflectance spectra, magnetic

susceptibility measurements, and thermogravimetry. The complexes showed a polymeric nature with a octahedral stereochem. at the coordinated metal atom. The fungicidal screening of the coordination polymers showed them to be antifungal against Penicillium islandicum, Rizopus nigricans and Botrydiplodia theobromae.

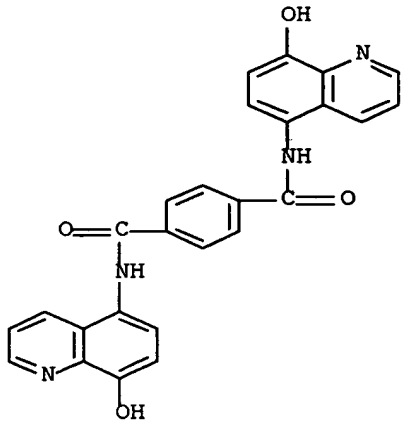
IT **104840-24-6P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antifungal activity of)

RN 104840-24-6 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(8-hydroxy-5-quinolinyl)- (9CI) (CA INDEX NAME)



L39 ANSWER 15 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1986:594282 HCAPLUS Full-text

DOCUMENT NUMBER: 105:194282

TITLE: Sweetening hydrocarbon fractions in the absence of an alkali compound

INVENTOR(S): Mimoun, Hubert; Bonnaudet, Serge; Saussine, Lucien; Franck, Jean-pierre

PATENT ASSIGNEE(S): Institut Francais du Petrole, Fr.

SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 181800	A1	19860521	EP 1985-402045	19851022
EP 181800	B1	19880427		
R: DE, GB, IT, NL				
FR 2573087	A1	19860516	FR 1984-17228	19841109
FR 2573087	B1	19870710		

PRIORITY APPLN. INFO.: FR 1984-17228 A 19841109

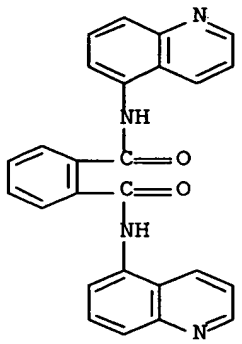
AB A hydrocarbon charge containing S compds. is sweetened by percolation through a layer of a catalyst based on ≥1 complex consisting of ≥1 chelate of ≥1 metal with ≥1 multidentate ligand with ≥1 amide group and with general formula ML2 or M(LH)2X2, in which M is a transition metal, X is an anion, and L is a bidentate ligand based on

picolinic acid amide or a primary amine derivative, a tridentate ligand based on a bis(picolinic acid) imide or a NH3-substituted derivative, a tetradentate ligand based on a bis(picolinic acid) imide or a derivative substituted by compds. with ≥2 primary amine groups separated by ≥2 C atoms, a ligand based on a cyclic dipicolinic acid bisimide or an NH3 derivative, or a ligand based on an oxalic acid diamide, or phthalic acid diamide, or a derivative M may be Co, Ni, Fe, Cu, or Mn; the catalyst support may be C, SiO2, Al2O3, an aluminosilicate, a zeolite, or an ion exchanger. Thus, the complex Co (phepia H)2Cl2 was prepared from CoCl2 and N-phenyl-picolinamide (phepia H), dissolved in water, and percolated through activated C to impregnate; treatment of kerosine containing total S 700 and mercaptan S 140 ppm at 160-300° in air for 50 h decreased the mercaptan S concentration to 2 ppm.

IT **104583-94-0D**, transition metal complexes
RL: USES (Uses)
(in sweetening of petroleum fractions)

RN 104583-94-0 HCAPLUS

CN 1,2-Benzenedicarboxamide, N,N'-di-5-quinolinyl- (9CI) (CA INDEX NAME)



L39 ANSWER 16 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:79557 HCAPLUS Full-text

DOCUMENT NUMBER: 100:79557

TITLE: Induction of petite mutants in yeast by nonintercalative DNA-binding antitumor agents

AUTHOR(S): Ferguson, Lynnette R.; Baguley, Bruce C.

CORPORATE SOURCE: Med. Sch., Univ. Auckland, Auckland, N. Z.

SOURCE: European Journal of Cancer & Clinical Oncology (1983), 19(11), 1575-83
CODEN: EJCODS; ISSN: 0277-5379

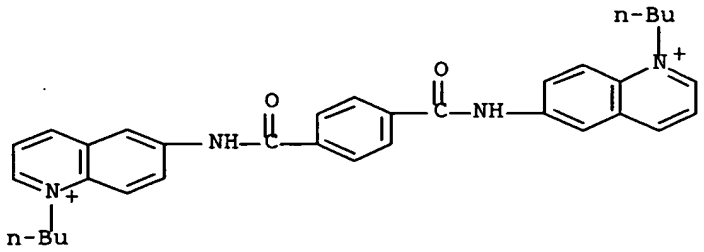
DOCUMENT TYPE: Journal

LANGUAGE: English

AB A series of 17 bis-charged nonintercalative DNA-binding antitumor agents and 7 related inactive compds. have been tested for the induction of respiratory deficient (petite) mutants in Saccharomyces cerevisiae D5. Many compds. were strong inducers of petite mutants at concns. which were not toxic to the growth of the yeast cells. Mutagenicity is only weakly correlated with in vitro inhibition of L1210 cell growth; however, mutagenicity, yeast toxicity and in vitro and in vivo antitumor activity are all correlated with selective binding to polydeoxy(adenylic-thymidylic) acid [26966-61-0] rather than polydeoxy(guanylic-cytidylic) acid [36786-90-0]. Thus, A-T-rich DNA may be a target for all the biol. effects measured in this study. Furthermore, the possibility that the target for antitumor action may be tumor cell mitochondrial DNA is supported by these results.

IT **14106-77-5**
RL: BIOL (Biological study)
(petite mutants in Saccharomyces cerevisiae induction by, DNA binding and antitumor activity in relation to)

RN 14106-77-5 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl- (9CI) (CA INDEX NAME)



L39 ANSWER 17 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1982:400302 HCAPLUS Full-text
DOCUMENT NUMBER: 97:302
TITLE: A comparison of the requirements for antitumor activity and antibacteriophage lambda activity for a series of nonintercalative DNA-binding agents
AUTHOR(S): Robertson, Iain G. C.; Baguley, Bruce C.
CORPORATE SOURCE: Dep. Cell Biol., Univ. Auckland, Auckland, N. Z.
SOURCE: European Journal of Cancer & Clinical Oncology (1982), 18(3), 271-9
CODEN: EJCODS; ISSN: 0277-5379
DOCUMENT TYPE: Journal
LANGUAGE: English

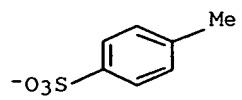
AB A series of nonintercalative DNA-binding agents, comprising mainly bisquaternary ammonium heterocyclic compds., inhibit strongly the production of bacteriophage lambda following its induction in Escherichia coli. The inhibition is much greater than that found with a number of DNA intercalating agents, including 9-aminoacridine, ethidium, and Daunorubicin. The inhibition correlated with antitumor effect, as measured in a life extension assay with L1210 leukemia. Activity in both biol. systems demanded the presence of strongly charged groups and a rigid coplanar aromatic skeleton, these requirements being almost identical to those needed to displace ethidium efficiently from DNA in a simple assay system. Biol. activity may be associated with the ability of these agents to bind in the minor groove of the DNA double helix. Previous data on the antibacteriophage action of one of these agents suggests possible models for antitumor activity.

IT **14120-88-8**
RL: BIOL (Biological study)
(bacteriophage λ and neoplasm inhibition by, structure in relation to)

RN 14120-88-8 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

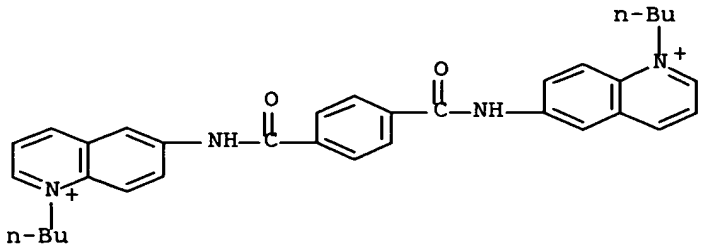
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

CRN 14106-77-5
CMF C34 H36 N4 O2



L39 ANSWER 18 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1979:66509 HCAPLUS Full-text
DOCUMENT NUMBER: 90:66509
TITLE: Potential antitumor agents. 29. Quantitative structure-activity relationships for the antileukemic bisquaternary ammonium heterocycles
AUTHOR(S): Denny, William A.; Atwell, Graham J.; Baguley, Bruce C.; Cain, Bruce F.
CORPORATE SOURCE: Exp. Chemother. Res. Lab., Pew Zealand Cancer Soc., Auckland, N. Z.
SOURCE: Journal of Medicinal Chemistry (1979), 22(2), 134-50
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Quant. relations between physicochem. drug properties and antileukemic (L1210) efficacy were examined for a series of bisquaternary ammonium heterocycles employing multiple variable regression anal. The synthesis of these compds. is described. The drug dose necessary to provide a 40% increase in life span and the chemotherapeutic index were independent of toxicity. There was a parabolic relation between agent lipophilic-hydrophilic balance and the percentage increase in mean life span of leukemic animals at the LD10 dose. Relative levels of drug-DNA interaction were obtained by spectrofluorimetric quantitation of drug displacement of DNA-bound ethidium. Extensive quant. structure-activity relations are discussed.

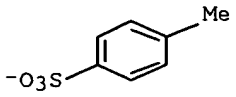
IT **14120-88-8 14120-89-9 14120-90-2**
14120-94-6 14170-93-5 14242-15-0
14357-93-8 18519-35-2 18519-37-4
18519-40-9 18519-41-0 18519-47-6
18519-49-8 18519-50-1 18519-65-8
18519-66-9 18519-67-0 18519-69-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(antileukemic activity of)

RN 14120-88-8 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

CM 1

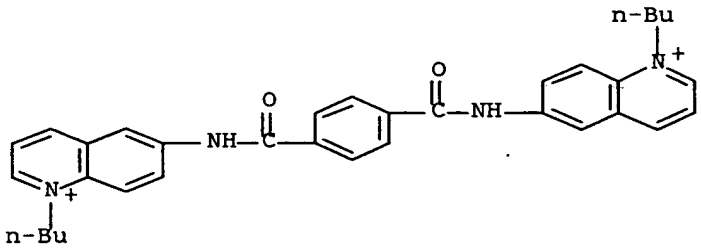
CRN 16722-51-3

CMF C7 H7 O3 S



CM 2

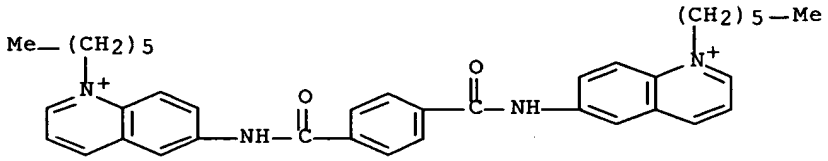
CRN 14106-77-5
CMF C34 H36 N4 O2



RN 14120-89-9 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-hexyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

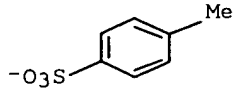
CM 1

CRN 50569-90-9
CMF C38 H44 N4 O2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

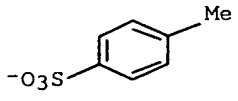


RN 14120-90-2 HCAPLUS

CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-methoxyethyl)-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

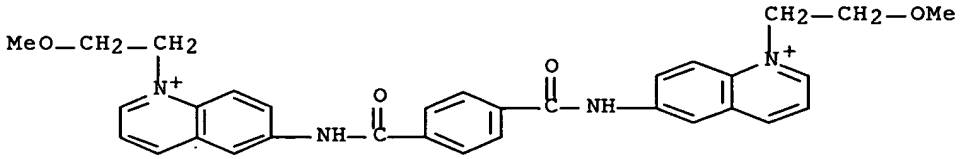
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

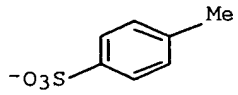
CRN 14106-79-7
CMF C32 H32 N4 O4



RN 14120-94-6 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

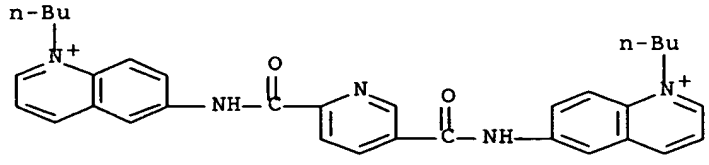
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

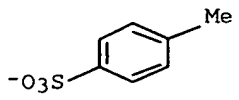
CRN 14106-83-3
CMF C33 H35 N5 O2



RN 14170-93-5 HCAPLUS
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-propyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

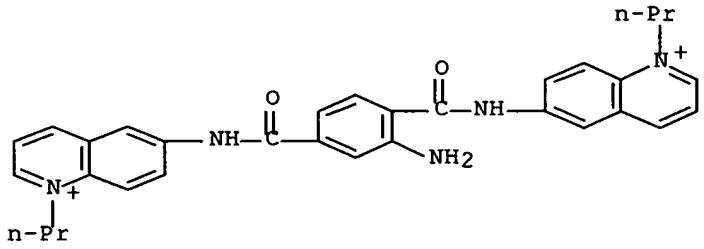
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

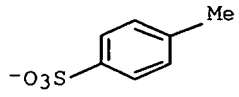
CRN 14106-85-5
CMF C32 H33 N5 O2



RN 14242-15-0 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-ethyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

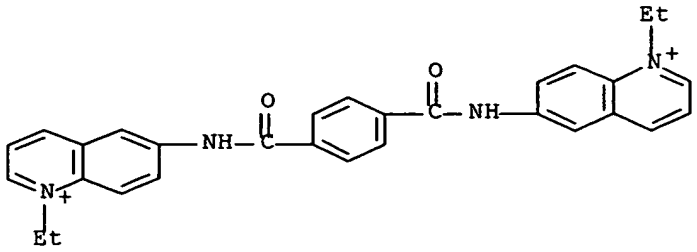
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

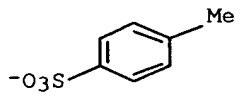
CRN 14242-10-5
CMF C30 H28 N4 O2



RN 14357-93-8 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-methyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

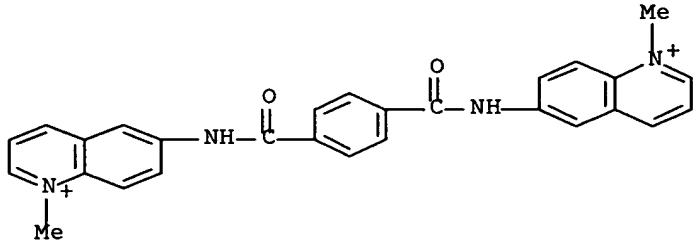
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

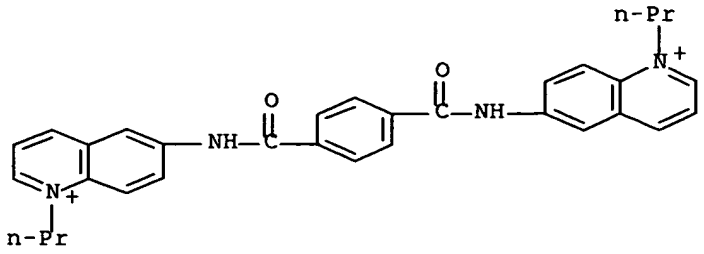
CRN 14357-86-9
CMF C28 H24 N4 O2



RN 18519-35-2 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-propyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

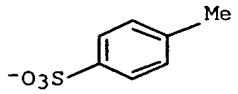
CM 1

CRN 23595-43-9
CMF C32 H32 N4 O2



CM 2

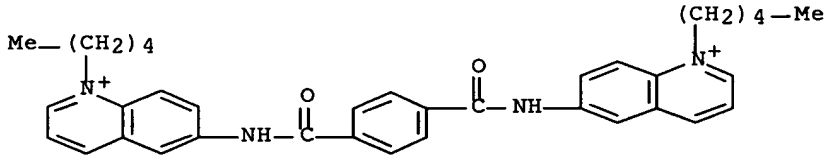
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-37-4 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-pentyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

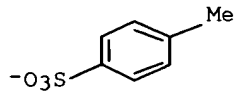
CM 1

CRN 23552-56-9
CMF C36 H40 N4 O2



CM 2

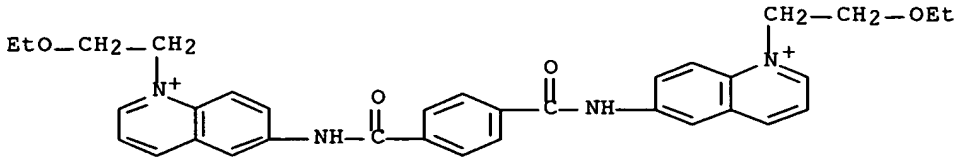
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-40-9 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-ethoxyethyl)-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

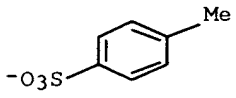
CM 1

CRN 50569-65-8
CMF C34 H36 N4 O4



CM 2

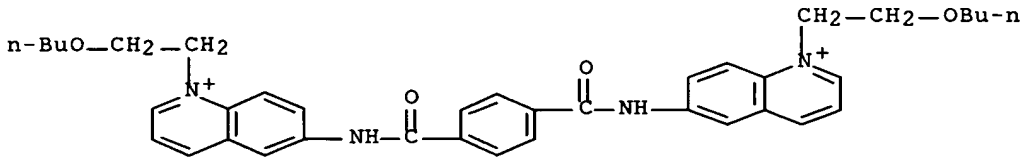
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-41-0 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-butoxyethyl)-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

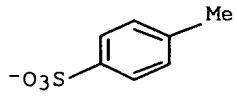
CM 1

CRN 50570-07-5
CMF C38 H44 N4 O4



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

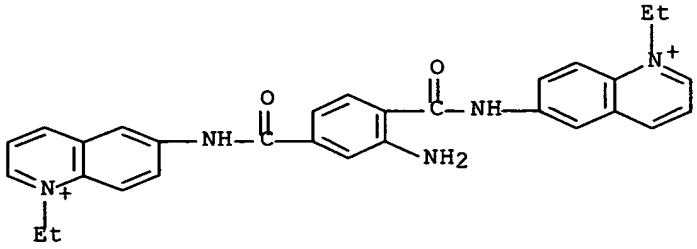


RN 18519-47-6 HCAPLUS

CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-ethyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

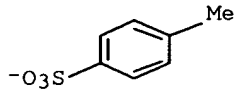
CM 1

CRN 47792-83-6
CMF C30 H29 N5 O2



CM 2

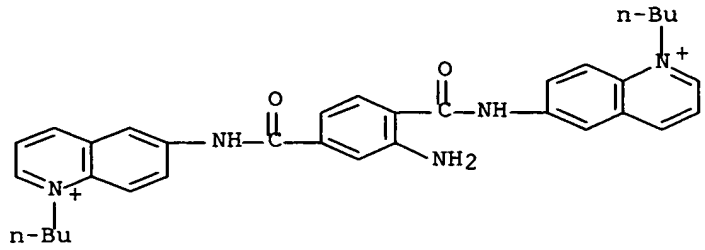
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-49-8 HCAPLUS
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

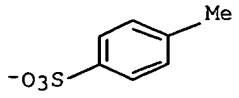
CM 1

CRN 47827-75-8
CMF C34 H37 N5 O2



CM 2

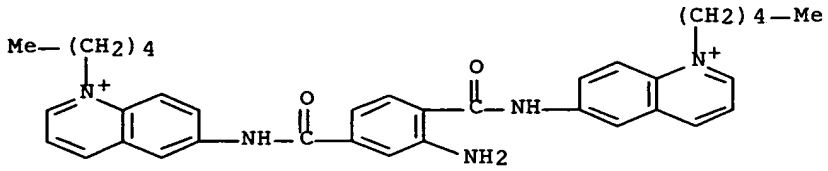
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-50-1 HCAPLUS
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-pentyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

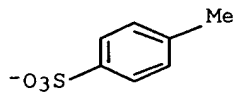
CM 1

CRN 47845-75-0
CMF C36 H41 N5 O2



CM 2

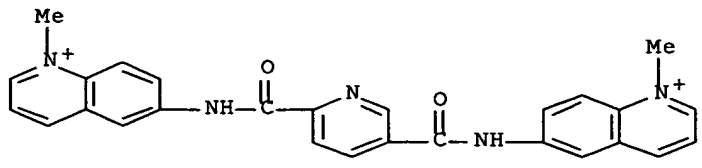
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-65-8 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-methyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

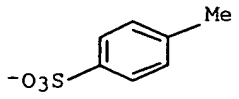
CM 1

CRN 47749-41-7
CMF C27 H23 N5 O2



CM 2

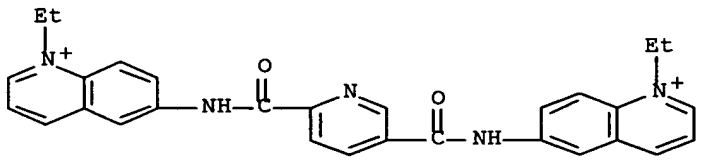
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-66-9 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-ethyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

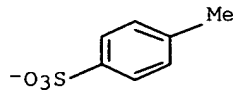
CM 1

CRN 47776-45-4
CMF C29 H27 N5 O2



CM 2

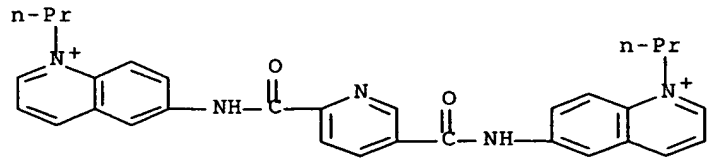
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-67-0 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-propyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

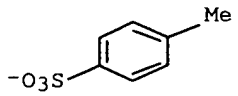
CM 1

CRN 47801-67-2
CMF C31 H31 N5 O2



CM 2

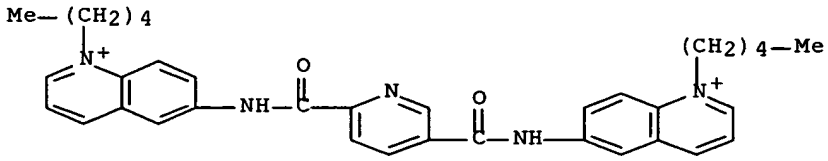
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-69-2 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-pentyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

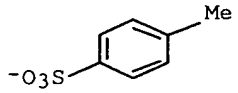
CM 1

CRN 47834-40-2
CMF C35 H39 N5 O2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



L39 ANSWER 19 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1969:438824 HCAPLUS Full-text
DOCUMENT NUMBER: 71:38824
TITLE: Quaternized bis-heterocyclic terephthalic acid diamides
INVENTOR(S): Plumpe, Hans; Bierling, Robert; Steinhoff, Dieter; Haberkorn, Axel
PATENT ASSIGNEE(S): Farbenfabriken Bayer A.-G.
SOURCE: Brit., 7 pp.
CODEN: BRXXAA
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1147295		19690402		
FR 1542276			FR	
FR 7220			FR	
PRIORITY APPLN. INFO.:			DE	19661103
			DE	19670724

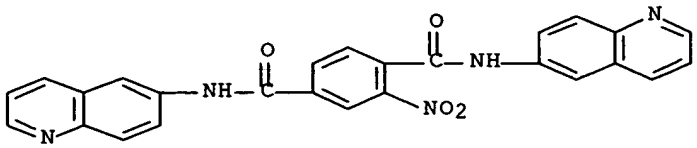
GI For diagram(s), see printed CA Issue.

AB The title compds. exhibiting trypanocidal and cytostatic activity are prepared by a number of methods. A suspension of 50.8 g. 1,4-C6H4(COCl)2 in 250 ml. C5H5N was added portion-wise to 79.2 g. 6-aminoquinoline (I) in 250 ml. C5H5N at 10°. The mixture was stirred for 15 hrs. at room temperature and at 50° for 1 hr. to give 105 g. II (A = B = Co) (III) m. 350°. Heating 41.8 g. III in 50 ml. PhNO2 with 50.4 g. Me2SO4 at 120° for 4 hrs. gave 61.8 g. III bis(methosulfate) (IV), m. 350°. Refluxing a mixture of 8 g. 1,4-C6H4(NCO)2 and 14.4 g. I in 50 ml. C6H6 1 hr. gave 20.5 g. II (A = CONH, B = NHCO), m. 350°, which on quaternization yielded the bis(methosulfate) (V), m. 230° (decomposition). By similar methods were prepared N,N'-bis(6- quinaldinyl)terephthalic acid diamide, m. 345-50° (decomposition), bis-(methosulfate), m. 195° (decomposition); N,N'-bis(1-methyl-5-benzimidazolyl)terephthalic acid diamide, m. >360°, bis(methosulfate), m. >360°; and the bis(ethosulfate) of III, m. 360°. Heating III and MeSO3H in PhNO2 gave III bis(methanesulfonate (VI), m. 348° (decomposition). Adding excess HCl to an aqueous solution of VI yielded III bis(methochloride), m. 315° (decomposition). Also prepared were N,N'-bis(6-quinolyl)-2-nitroterephthalic acid diamide, 292° (decomposition), bis(methosulfate), m. 278° (decomposition); N,N'-bis(6-quinolyl)-2-chloroterephthalic acid diamide, m. 274°, bis(methosulfate), m. 280° (decomposition); N,N'-bis(2-methyl-6-benzothiazolyl)terephthalic acid diamide, m. 285° (decomposition), bis(methosulfate, m. >350°; N,N'-bis(6-quinolyl)furandicarboxylic acid diamide, m. >260° (decomposition), bismethosulfate, m. 353° (decomposition). Against Trypanosoma congolense in mice, IV was fully protective at doses of 250 mg./kg. when injected s.c. 24 hrs. after infection; V was similarly at a dose of 10 mg./kg. The corresponding effective doses of IV and V against T. brucei in mice were 5 and 10 mg./kg., resp. S.c. LD50 figures in mice were 1000 and 250 mg./kg., resp., for IV and V. The compds. were effective in prolonging survival time of mice with leukemia L 1210 infections.

IT **18519-42-1P 18520-62-2P 22726-88-1P**
22726-90-5P 22726-96-1P 22726-98-3P
22726-99-4P 22727-01-1P 22727-02-2P
22727-03-3P 22727-04-4P 24725-00-6P
24769-91-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

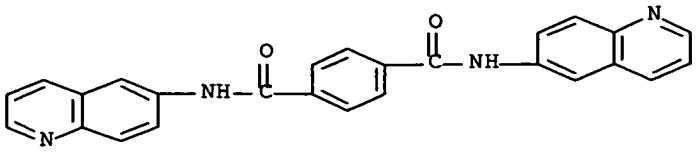
RN 18519-42-1 HCAPLUS

CN Terephthalamide, 2-nitro-N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)



RN 18520-62-2 HCAPLUS

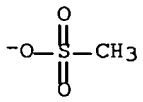
CN Terephthalamide, N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)



RN 22726-88-1 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-methyl-, dimethanesulfonate (8CI) (CA INDEX NAME)

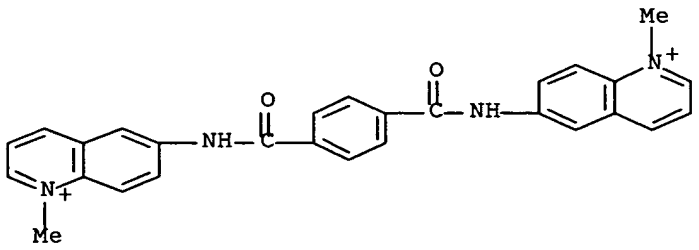
CM 1

CRN 16053-58-0
CMF C H3 O3 S

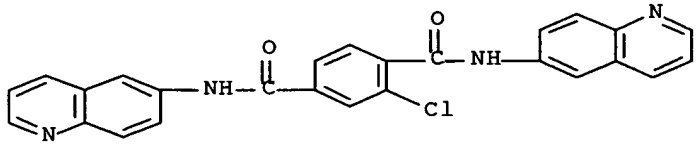


CM 2

CRN 14357-86-9
CMF C28 H24 N4 O2



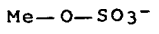
RN 22726-90-5 HCAPLUS
CN Terephthalamide, 2-chloro-N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)



RN 22726-96-1 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-methyl-, bis(methyl sulfate) (8CI) (CA INDEX NAME)

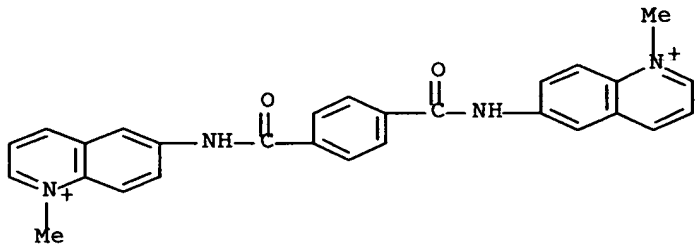
CM 1

CRN 21228-90-0
CMF C H3 O4 S

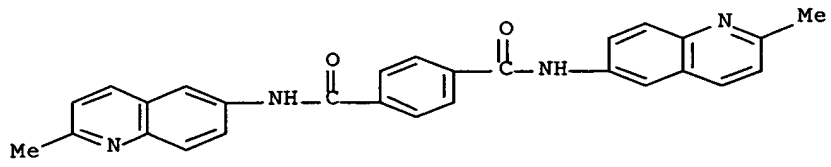


CM 2

CRN 14357-86-9
CMF C28 H24 N4 O2



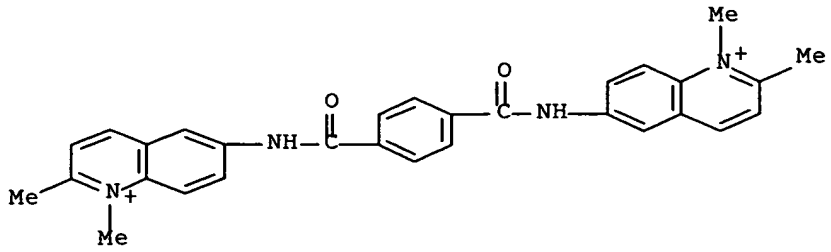
RN 22726-98-3 HCAPLUS
CN Terephthalamide, N,N'-bis(2-methyl-6-quinolyl)- (8CI) (CA INDEX NAME)



RN 22726-99-4 HCAPLUS
CN Quinaldinium, 6,6'-(terephthaloyldiimino)bis[1-methyl-, bis(methyl sulfate) (8CI) (CA INDEX NAME)

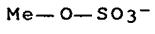
CM 1

CRN 50568-01-9
CMF C30 H28 N4 O2



CM 2

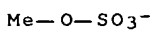
CRN 21228-90-0
CMF C H3 O4 S



RN 22727-01-1 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-ethyl-, bis(methyl sulfate) (8CI) (CA INDEX NAME)

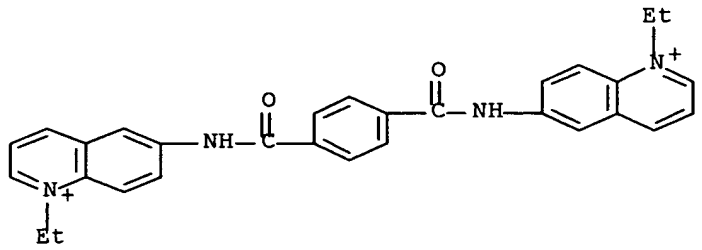
CM 1

CRN 21228-90-0
CMF C H3 O4 S

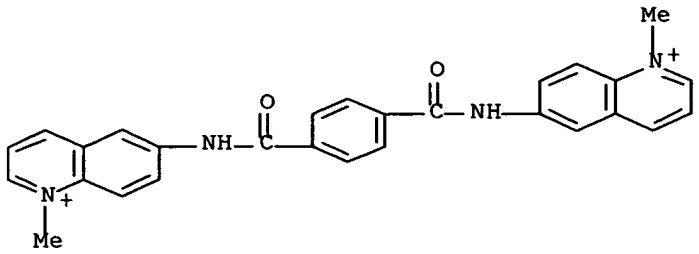


CM 2

CRN 14242-10-5
CMF C30 H28 N4 O2



RN 22727-02-2 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-methyl-, dichloride (8CI) (CA INDEX NAME)

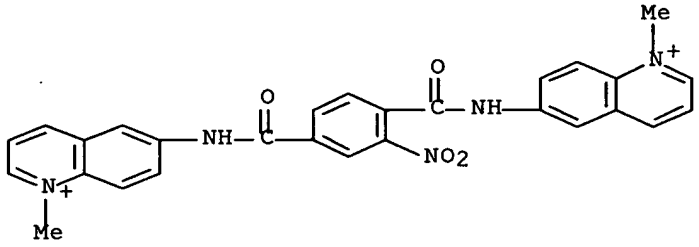


●2 Cl⁻

RN 22727-03-3 HCAPLUS
CN Quinolinium, 6,6'-[(nitroterephthaloyl)diimino]bis[1-methyl-, bis(methyl sulfate) (8CI) (CA INDEX NAME)

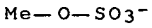
CM 1

CRN 47793-44-2
CMF C28 H23 N5 O4



CM 2

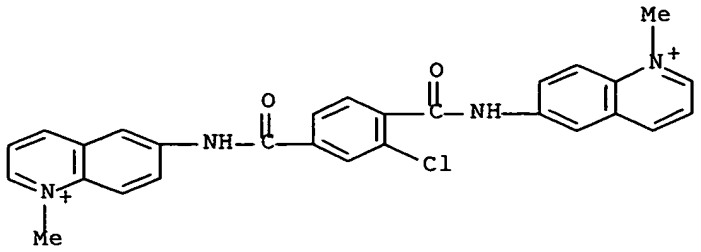
CRN 21228-90-0
CMF C H3 O4 S



RN 22727-04-4 HCAPLUS
CN Quinolinium, 6,6'-[(chloroterephthaloyl)diimino]bis[1-methyl-, bis(methyl sulfate) (8CI) (CA INDEX NAME)

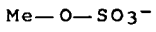
CM 1

CRN 47766-43-8
CMF C28 H23 Cl N4 O2

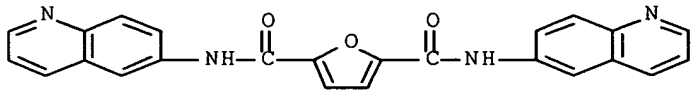


CM 2

CRN 21228-90-0
CMF C H3 O4 S



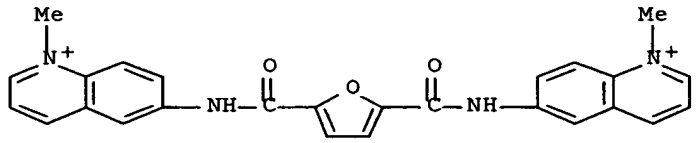
RN 24725-00-6 HCAPLUS
CN 2,5-Furandicarboxamide, N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)



RN 24769-91-3 HCAPLUS
CN Quinolinium, 6,6'-[2,5-furandiylbis(carbonylimino)]bis[1-methyl-, bis(methyl sulfate) (8CI) (CA INDEX NAME)

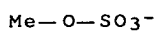
CM 1

CRN 50567-60-7
CMF C26 H22 N4 O3



CM 2

CRN 21228-90-0
CMF C H3 O4 S

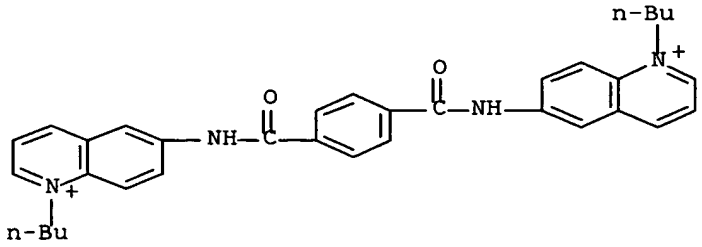


L39 ANSWER 20 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1969:95108 HCAPLUS Full-text
DOCUMENT NUMBER: 70:95108
TITLE: Potential antitumor agents. X. Bisquaternary salts
AUTHOR(S): Cain, Bruce F.; Atwell, G. J.; Seelye, Ralph N.
CORPORATE SOURCE: Cornwall Geriatric Hosp., Auckland, N. Z.
SOURCE: Journal of Medicinal Chemistry (1969), 12(2), 199-206
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English

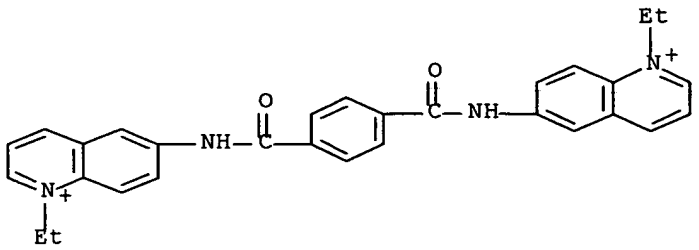
AB The biol. activity of a variety of cationic agents against exptl. leukemias and trypanosomal species may be dependent on (a) lipophilic-hydrophilic balance of the agents, (b) charge separation, (c) sufficient contact binding, this requirement varying with the biol. test system involved, (d) a close over-all approach to planarity, and (e) capacity to fit a curved site of approx. 40 A. in diameter That migration of these materials may be transport mediated is discussed. It is shown that a site equivalent to the minor groove in a helical polynucleotide would match the structural requirements.

IT **14106-77-5 14242-10-5 14357-86-9**
23552-56-9 23595-43-9 50569-90-9
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(biol. activity of)

RN 14106-77-5 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl- (9CI) (CA INDEX NAME)

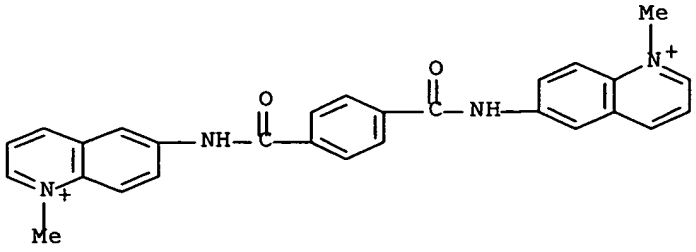


RN 14242-10-5 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-ethyl- (8CI) (CA INDEX NAME)

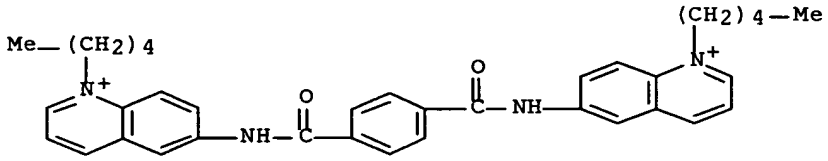


RN 14357-86-9 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-methyl- (8CI) (CA INDEX

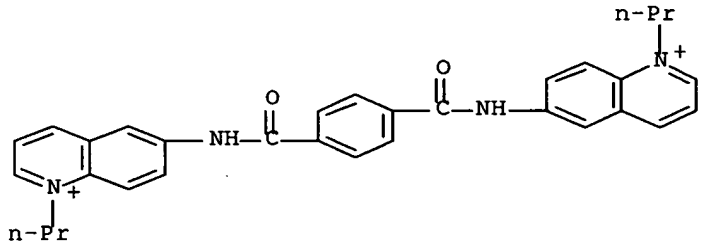
NAME)



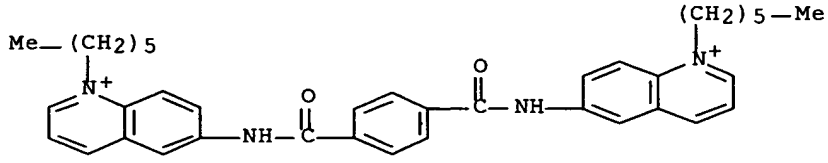
RN 23552-56-9 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-pentyl- (8CI) (CA INDEX NAME)



RN 23595-43-9 HCAPLUS
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-propyl- (8CI) (CA INDEX NAME)

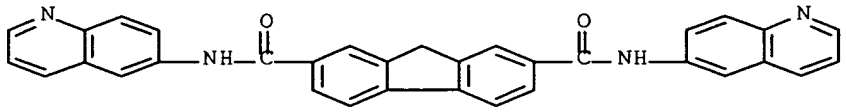


RN 50569-90-9 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-hexyl- (9CI) (CA INDEX NAME)

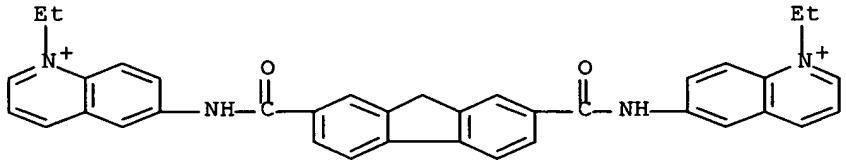


L39 ANSWER 21 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1968:486796 HCAPLUS Full-text

DOCUMENT NUMBER: 69:86796
TITLE: Potential antitumor agents. IX. Bisquaternary salts
AUTHOR(S): Cain, B. F.; Atwell, G. J.; Seelye, R. N.
CORPORATE SOURCE: Cornwall Geriatric Hosp., Auckland, N. Z.
SOURCE: Journal of Medicinal Chemistry (1968), 11(5), 963-6
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The postulate that a close approach to overall planarity in bisquaternary ammonium heterocycles is essential for maximum activity when tested against the L1210 system was further investigated. The preparation of L1210 active quaternary salts containing a biphenyl system [e.g. I bis(p-toluenesulfonate)] suggests that complete planarity in this type of mol. is not an essential requirement.
IT **19585-75-2P 19585-76-3P 19585-77-4P**
19585-78-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 19585-75-2 HCAPLUS
CN Fluorene-2,7-dicarboxamide, N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)

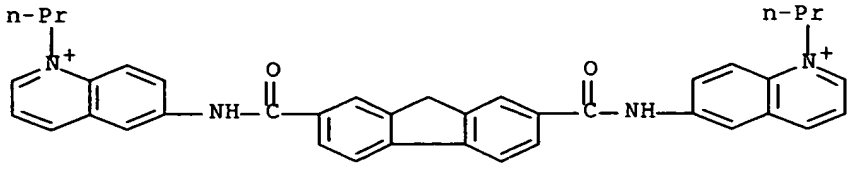


RN 19585-76-3 HCAPLUS
CN Quinolinium, 6,6'-[fluoren-2,7-ylenebis(carbonylimino)]bis[1-ethyl-, diiodide (8CI) (CA INDEX NAME)



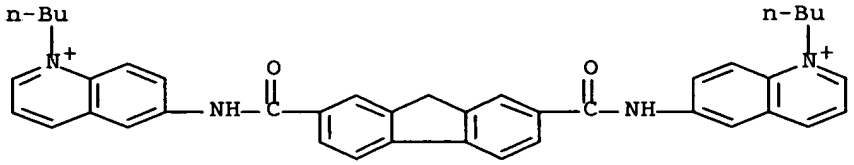
●2 I⁻

RN 19585-77-4 HCAPLUS
CN Quinolinium, 6,6'-[fluoren-2,7-ylenebis(carbonylimino)]bis[1-propyl-, diiodide (8CI) (CA INDEX NAME)



●2 I⁻

RN 19585-78-5 HCAPLUS
CN Quinolinium, 6,6'-[fluoren-2,7-ylenebis(carbonylimino)]bis[1-butyl-, diiodide (8CI) (CA INDEX NAME)



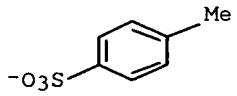
●2 I⁻

L39 ANSWER 22 OF 22 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1968:114394 HCAPLUS Full-text
DOCUMENT NUMBER: 68:114394
TITLE: Potential antitumor agents. V. Bisquaternary salts
AUTHOR(S): Atwell, G. J.; Cain, Bruce F.
CORPORATE SOURCE: Cornwall Geriatric Hosp., Auckland, N. Z.
SOURCE: Journal of Medicinal Chemistry (1967), 10(4), 706-13
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB A series of bis quaternary ammonium heterocycles, e.g. I (R = R' = H, alkyl, or alkoxyalkyl), were prepared and evaluated against the L1210 leukemia system.
IT **14120-88-8P 14120-89-9P 14120-90-2P**
14120-94-6P 14120-95-7P 14120-96-8P
14170-93-5P 14242-15-0P 14357-93-8P
18519-35-2P 18519-37-4P 18519-40-9P
18519-41-0P 18519-42-1P 18519-43-2P
18519-45-4P 18519-46-5P 18519-47-6P
18519-49-8P 18519-50-1P 18519-64-7P
18519-65-8P 18519-66-9P 18519-67-0P
18519-69-2P 18519-70-5P 18519-71-6P
18519-73-8P 18519-74-9P 18519-75-0P
18519-76-1P 18519-77-2P 18519-78-3P
18519-79-4P 18519-80-7P 18520-30-4P
18520-31-5P 18520-32-6P 18520-33-7P
18520-62-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 14120-88-8 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

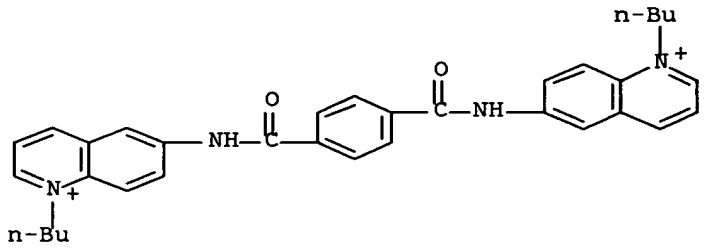
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

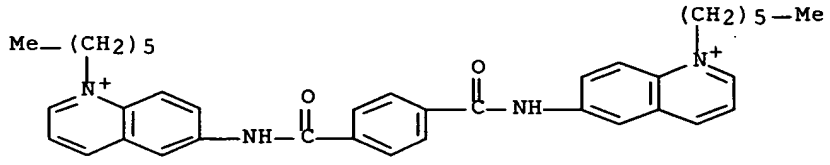
CRN 14106-77-5
CMF C34 H36 N4 O2



RN 14120-89-9 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-hexyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

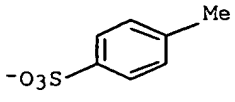
CM 1

CRN 50569-90-9
CMF C38 H44 N4 O2



CM 2

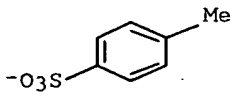
CRN 16722-51-3
CMF C7 H7 O3 S



RN 14120-90-2 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-methoxyethyl)-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

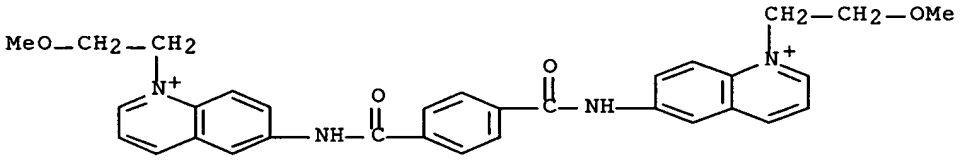
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

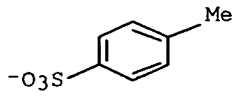
CRN 14106-79-7
CMF C32 H32 N4 O4



RN 14120-94-6 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

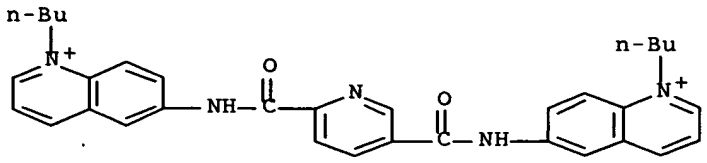
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

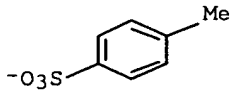
CRN 14106-83-3
CMF C33 H35 N5 O2



RN 14120-95-7 HCAPLUS
CN Quinolinium, 6,6'-[(2-nitro-1,4-phenylene)bis(carbonylimino)]bis[1-propyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

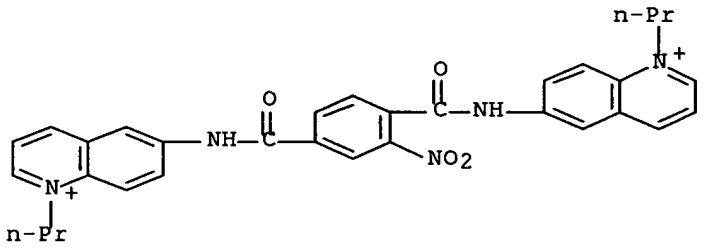
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

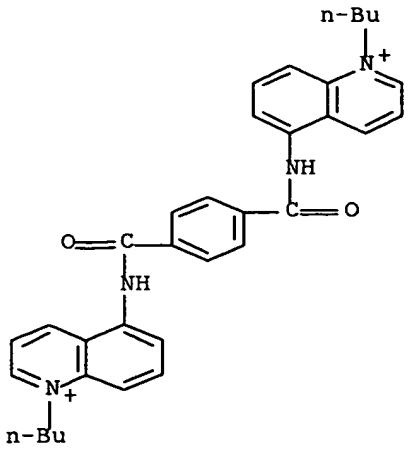
CRN 14106-84-4
CMF C32 H31 N5 O4



RN 14120-96-8 HCAPLUS
CN Quinolinium, 5,5'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

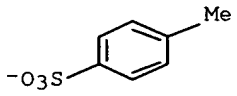
CM 1

CRN 50569-42-1
CMF C34 H36 N4 O2



CM 2

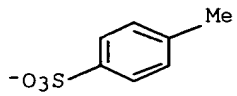
CRN 16722-51-3
CMF C7 H7 O3 S



RN 14170-93-5 HCAPLUS
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-propyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

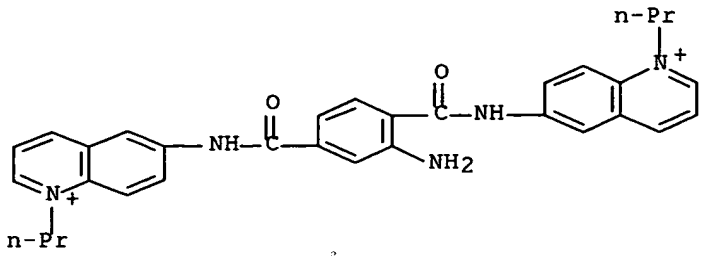
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

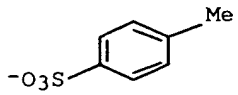
CRN 14106-85-5
CMF C32 H33 N5 O2



RN 14242-15-0 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-ethyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

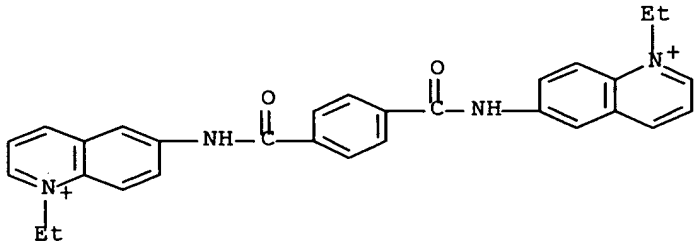
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

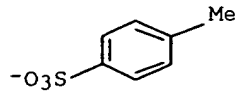
CRN 14242-10-5
CMF C30 H28 N4 O2



RN 14357-93-8 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-methyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

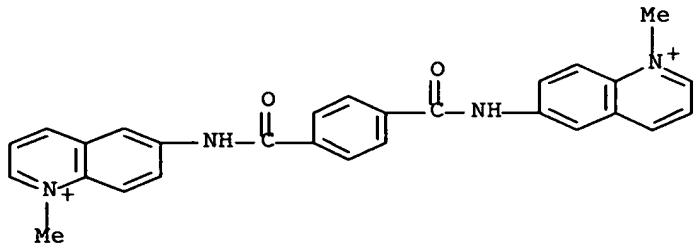
CM 1

CRN 16722-51-3
CMF C7 H7 O3 S



CM 2

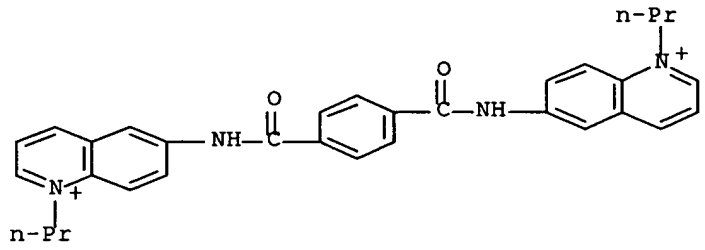
CRN 14357-86-9
CMF C28 H24 N4 O2



RN 18519-35-2 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-propyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

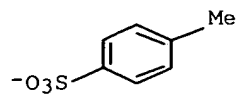
CM 1

CRN 23595-43-9
CMF C32 H32 N4 O2



CM 2

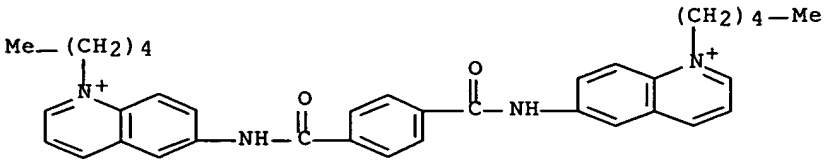
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-37-4 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-pentyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

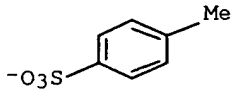
CM 1

CRN 23552-56-9
CMF C36 H40 N4 O2



CM 2

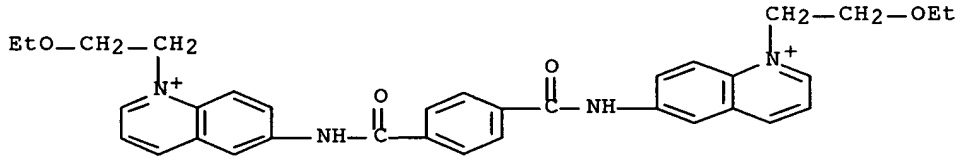
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-40-9 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-ethoxyethyl)-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

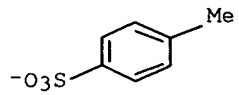
CM 1

CRN 50569-65-8
CMF C34 H36 N4 O4



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

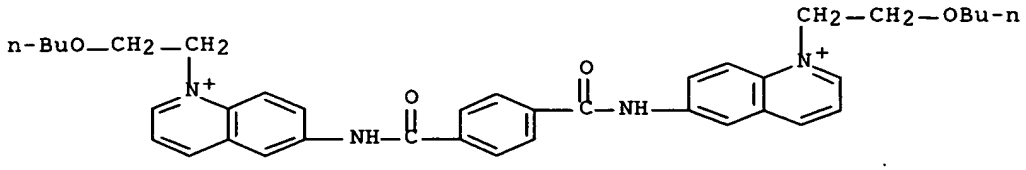


RN 18519-41-0 HCAPLUS
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-butoxyethyl)-,

salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

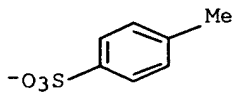
CM 1

CRN 50570-07-5
CMF C38 H44 N4 O4

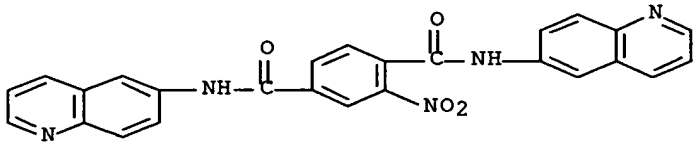


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



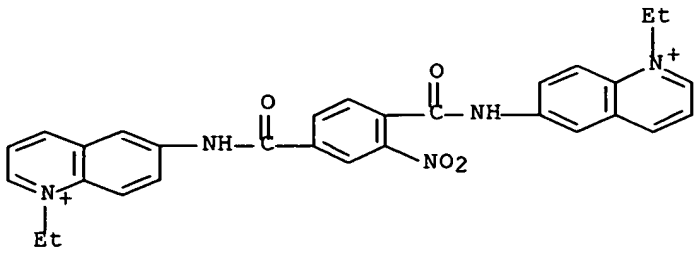
RN 18519-42-1 HCAPLUS
CN Terephthalamide, 2-nitro-N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)



RN 18519-43-2 HCAPLUS
CN Quinolinium, 6,6'-[(nitroterephthaloyl)diimino]bis[1-ethyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

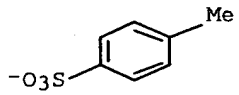
CM 1

CRN 47812-61-3
CMF C30 H27 N5 O4



CM 2

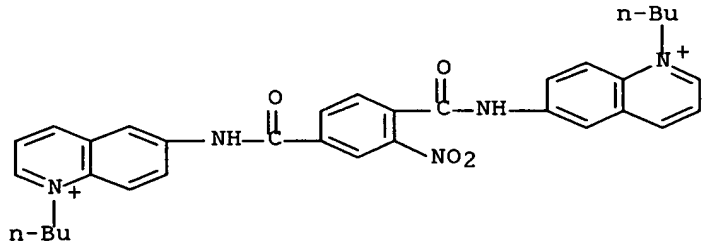
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-45-4 HCAPLUS
CN Quinolinium, 6,6'-[(nitroterephthaloyl)diimino]bis[1-butyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

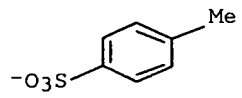
CM 1

CRN 47845-76-1
CMF C34 H35 N5 O4



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

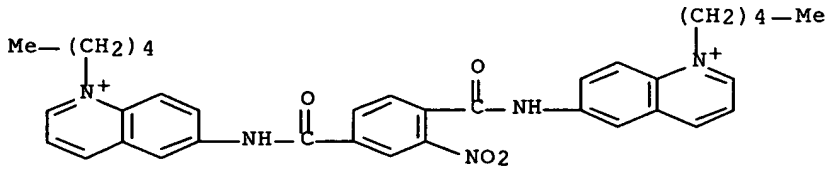


RN 18519-46-5 HCAPLUS

CN Quinolinium, 6,6'-[(nitroterephthaloyl)diimino]bis[1-pentyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

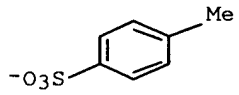
CM 1

CRN 47858-54-8
CMF C36 H39 N5 O4



CM 2

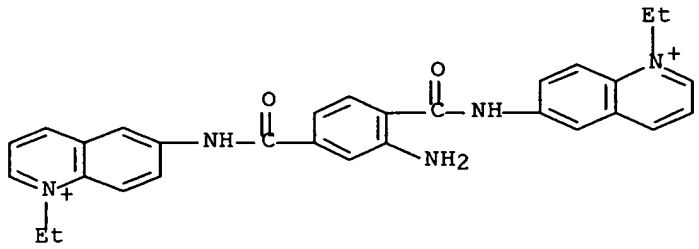
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-47-6 HCAPLUS
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-ethyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

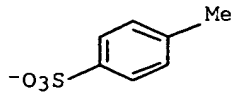
CM 1

CRN 47792-83-6
CMF C30 H29 N5 O2



CM 2

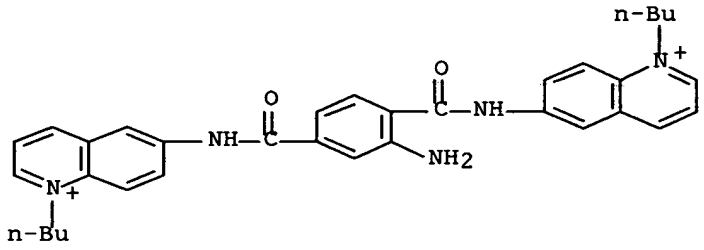
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-49-8 HCAPLUS
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

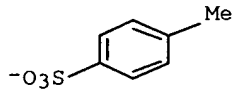
CM 1

CRN 47827-75-8
CMF C34 H37 N5 O2



CM 2

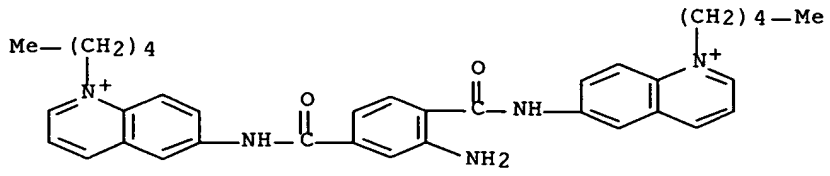
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-50-1 HCAPLUS
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-pentyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

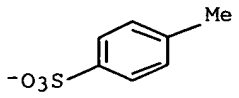
CM 1

CRN 47845-75-0
CMF C36 H41 N5 O2

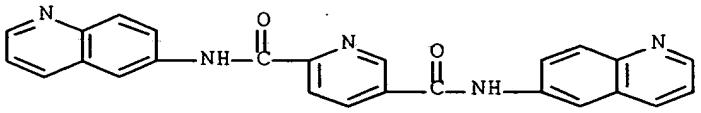


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



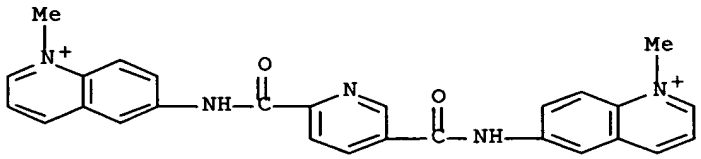
RN 18519-64-7 HCAPLUS
CN 2,5-Pyridinedicarboxamide, N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)



RN 18519-65-8 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-methyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

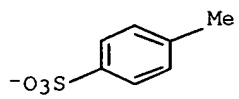
CM 1

CRN 47749-41-7
CMF C27 H23 N5 O2



CM 2

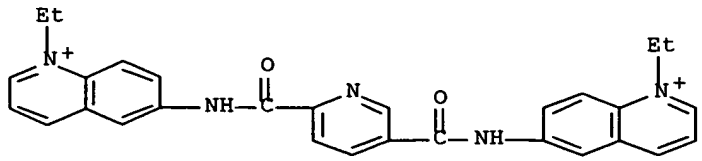
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-66-9 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-ethyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

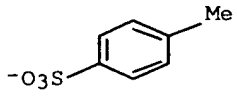
CM 1

CRN 47776-45-4
CMF C29 H27 N5 O2



CM 2

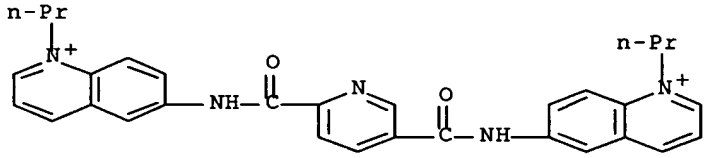
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-67-0 HCAPLUS
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-propyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

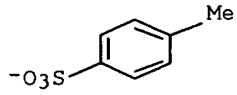
CM 1

CRN 47801-67-2
CMF C31 H31 N5 O2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

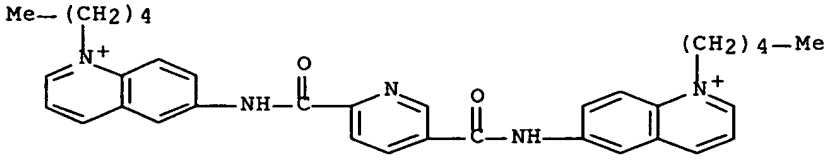


RN 18519-69-2 HCAPLUS

CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-pentyl-, salt with 4-methylbenzenesulfonic acid (1:2) (9CI) (CA INDEX NAME)

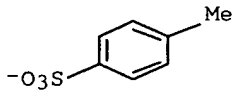
CM 1

CRN 47834-40-2
CMF C35 H39 N5 O2

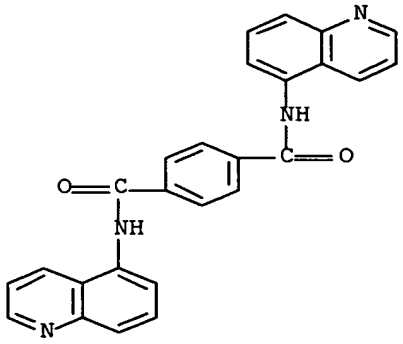


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



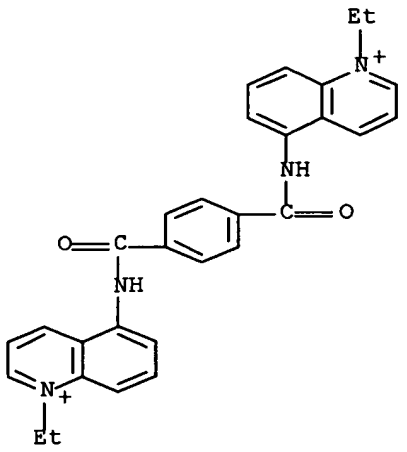
RN 18519-70-5 HCAPLUS
CN Terephthalamide, N,N'-di-5-quinolyl- (8CI) (CA INDEX NAME)



RN 18519-71-6 HCAPLUS
CN Quinolinium, 5,5'-(terephthaloyldiimino)bis[1-ethyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

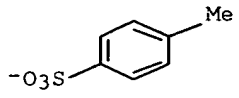
CM 1

CRN 50568-74-6
CMF C30 H28 N4 O2

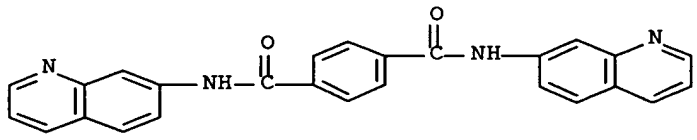


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



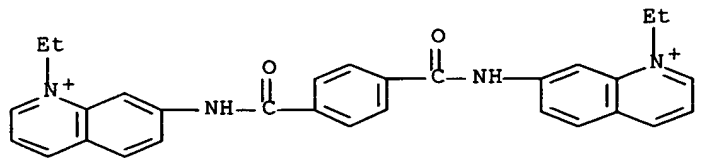
RN 18519-73-8 HCAPLUS
CN Terephthalamide, N,N'-di-7-quinolyl- (8CI) (CA INDEX NAME)



RN 18519-74-9 HCAPLUS
CN Quinolinium, 7,7'-(terephthaloyldiimino)bis[1-ethyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

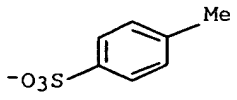
CM 1

CRN 50568-77-9
CMF C30 H28 N4 O2



CM 2

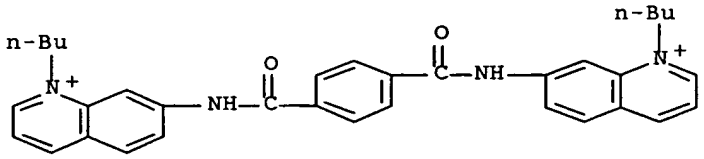
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18519-75-0 HCAPLUS
CN Quinolinium, 7,7'-(terephthaloyldiimino)bis[1-butyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

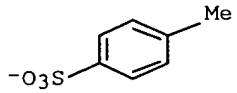
CM 1

CRN 50569-47-6
CMF C34 H36 N4 O2

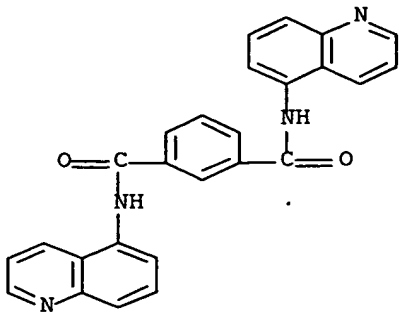


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



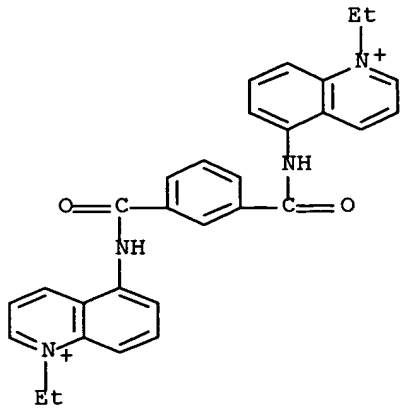
RN 18519-76-1 HCAPLUS
CN Isophthalamide, N,N'-di-5-quinolyl- (8CI) (CA INDEX NAME)



RN 18519-77-2 HCAPLUS
CN Quinolinium, 5,5'-(isophthaloyldiimino)bis[1-ethyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

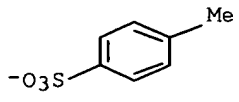
CM 1

CRN 50568-73-5
CMF C30 H28 N4 O2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

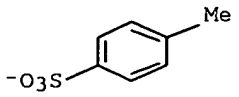


RN 18519-78-3 HCAPLUS
CN Quinolinium, 5,5'-(isophthaloyldiimino)bis[1-butyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

CM 1

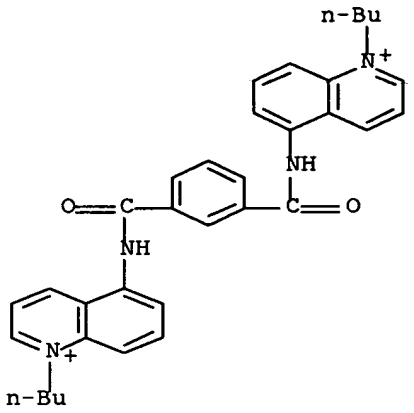
CRN 16722-51-3

CMF C7 H7 O3 S

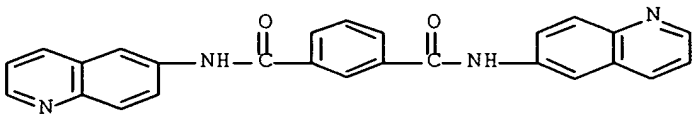


CM 2

CRN 14106-87-7
CMF C34 H36 N4 O2



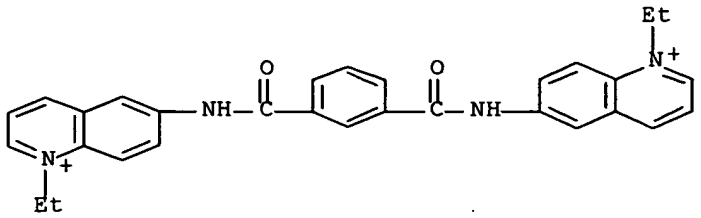
RN 18519-79-4 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-di-6-quinolinyl- (9CI) (CA INDEX NAME)



RN 18519-80-7 HCAPLUS
CN Quinolinium, 6,6'-(isophthaloyldiimino)bis[1-ethyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

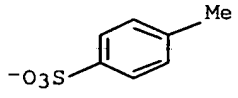
CM 1

CRN 50568-78-0
CMF C30 H28 N4 O2



CM 2

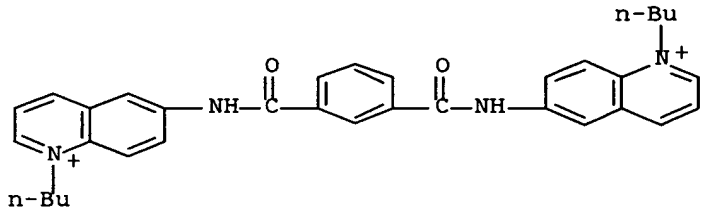
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18520-30-4 HCAPLUS
CN Quinolinium, 6,6'-(isophthaloyldiimino)bis[1-butyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

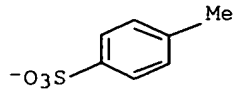
CM 1

CRN 50569-49-8
CMF C34 H36 N4 O2

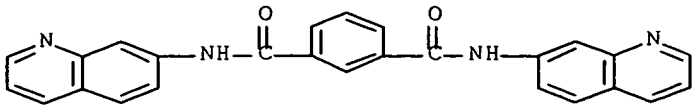


CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



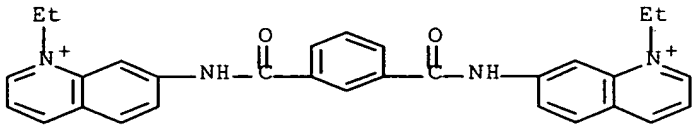
RN 18520-31-5 HCAPLUS
CN Isophthalamide, N,N'-di-7-quinolyl- (8CI) (CA INDEX NAME)



RN 18520-32-6 HCAPLUS
CN Quinolinium, 7,7'-(isophthaloyldiimino)bis[1-ethyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

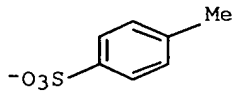
CM 1

CRN 50568-76-8
CMF C30 H28 N4 O2



CM 2

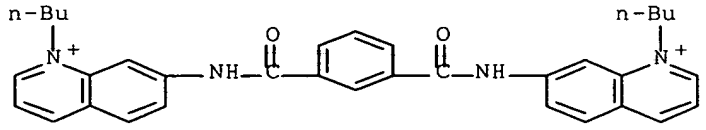
CRN 16722-51-3
CMF C7 H7 O3 S



RN 18520-33-7 HCAPLUS
CN Quinolinium, 7,7'-(isophthaloyldiimino)bis[1-butyl-, di-p-toluenesulfonate (8CI) (CA INDEX NAME)

CM 1

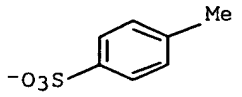
CRN 50569-46-5
CMF C34 H36 N4 O2



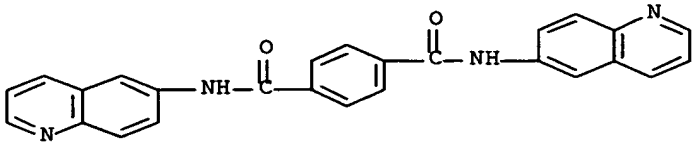
CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



RN 18520-62-2 HCAPLUS
CN Terephthalamide, N,N'-di-6-quinolyl- (8CI) (CA INDEX NAME)



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L36 STR
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L40 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L38 NOT L39

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L40 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:650985 HCAPLUS Full-text
DOCUMENT NUMBER: 141:185084
TITLE: G-quadruplex-binding quaternary nitrogen-containing heterocyclic compounds, their preparation, and their use as antitumor agents
INVENTOR(S): Hittinger, Augustin; Caulfield, Thomas; Maillet, Patrick; Bouchard, Herve; Mandine, Eliane; Belmokhtar, Chafke; Mergny, Jean Louis; Guittat, Lionel; Riou, Jean Francois; Gomez, Dennis
PATENT ASSIGNEE(S): Aventis Pharma S. A., Fr.; Centre National de la Recherche Scientifique CNRS; Museum National d'Histoire Naturelle; Institut Curie; Commissariat a l'Energie Atomique; Universite de Reims Champagne Ardenne
SOURCE: Fr. Demande, 57 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2850970	A1	20040813	FR 2003-1478	20030207
WO 2004072027	A2	20040826	WO 2004-FR260	20040205
WO 2004072027	A3	20040923		

W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI

RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: FR 2003-1478 A 20030207

OTHER SOURCE(S): MARPAT 141:185084

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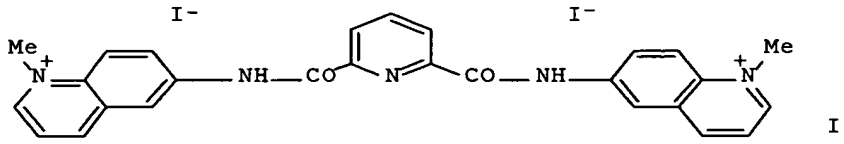


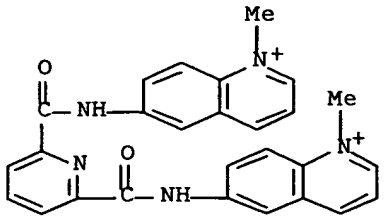
I

AB The invention provides G-quadruplex-binding quaternary nitrogen-containing heterocyclic compds. for use as antitumor agents in humans. Preparation of e.g. 2,6-pyridine dicarboxylic acid bis[(1-methylquinolin-6-yl)amide] diiodide (I) is described. The compds of the invention have telomerase-inhibitory activity.

IT **737763-27-8P 737763-28-9P 737763-29-0P**
737763-30-3P 737763-31-4P 737763-32-5P
737763-33-6P 737763-34-7P 737763-35-8P
737763-36-9P 737763-37-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(G-quadruplex-binding quaternary nitrogen-containing heterocyclic compound preparation and use as antitumor agents)

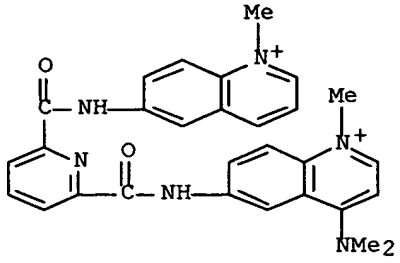
RN 737763-27-8 HCAPLUS

CN Quinolinium, 6,6'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl-, diiodide (9CI) (CA INDEX NAME)



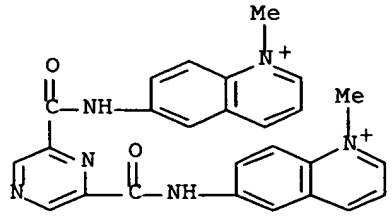
●2 I⁻

RN 737763-28-9 HCAPLUS
CN Quinolinium, 4-(dimethylamino)-1-methyl-6-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]-, diiodide (9CI) (CA INDEX NAME)



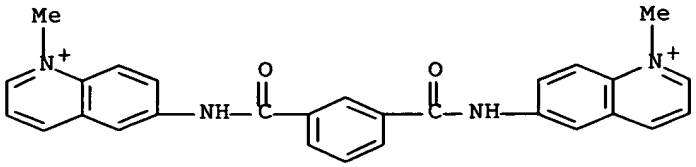
●2 I⁻

RN 737763-29-0 HCAPLUS
CN Quinolinium, 6,6'-[2,6-pyrazinediylbis(carbonylimino)]bis[1-methyl-, diiodide (9CI) (CA INDEX NAME)



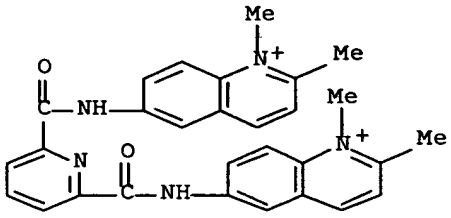
●2 I⁻

RN 737763-30-3 HCAPLUS
CN Quinolinium, 6,6'-[1,3-phenylenebis(carbonylimino)]bis[1-methyl-, diiodide (9CI) (CA INDEX NAME)



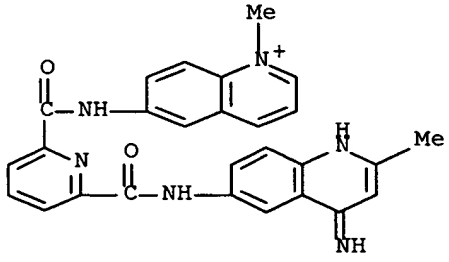
●2 I⁻

RN 737763-31-4 HCAPLUS
CN Quinolinium, 6,6'-[2,6-pyridinediylbis(carbonylimino)]bis[1,2-dimethyl-, diiodide (9CI) (CA INDEX NAME)



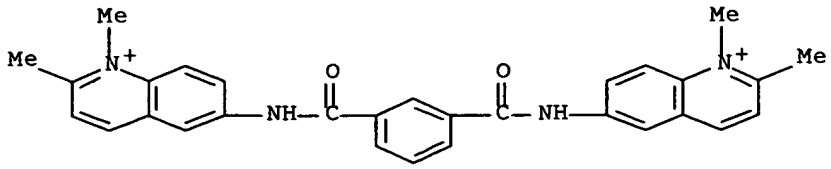
●2 I⁻

RN 737763-32-5 HCAPLUS
CN Quinolinium, 6-[[[6-[[(1,4-dihydro-4-imino-2-methyl-6-quinolinyl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]-1-methyl-, iodide (9CI) (CA INDEX NAME)



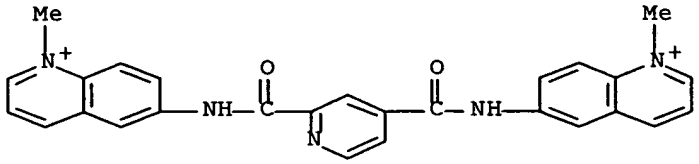
● I⁻

RN 737763-33-6 HCAPLUS
CN Quinolinium, 6,6'-[1,3-phenylenebis(carbonylimino)]bis[1,2-dimethyl-, diiodide (9CI) (CA INDEX NAME)



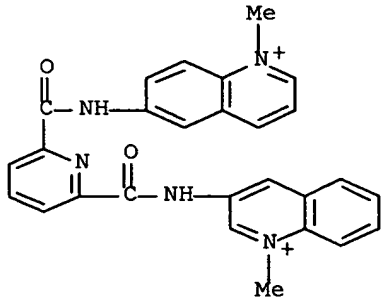
●2 I⁻

RN 737763-34-7 HCAPLUS
CN Quinolinium, 6,6'-[2,4-pyridinediylbis(carbonylimino)]bis[1-methyl-, diiodide (9CI) (CA INDEX NAME)



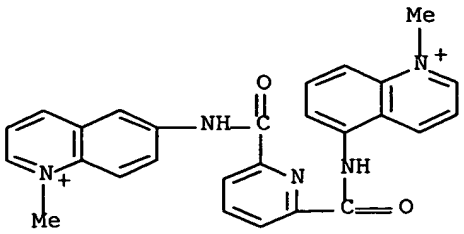
●2 I⁻

RN 737763-35-8 HCAPLUS
CN Quinolinium, 1-methyl-3-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]-, diiodide (9CI) (CA INDEX NAME)



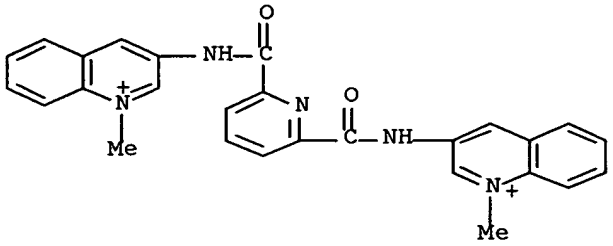
●2 I⁻

RN 737763-36-9 HCAPLUS
CN Quinolinium, 1-methyl-5-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]-, diiodide (9CI) (CA INDEX NAME)



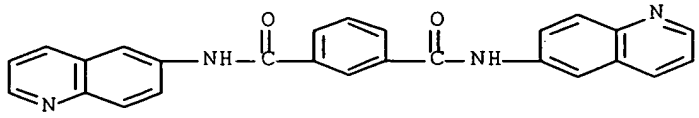
●2 I⁻

RN 737763-37-0 HCAPLUS
CN Quinolinium, 3,3'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl-, diiodide (9CI) (CA INDEX NAME)

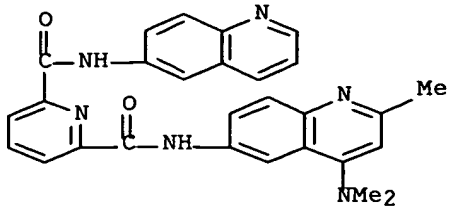


●2 I⁻

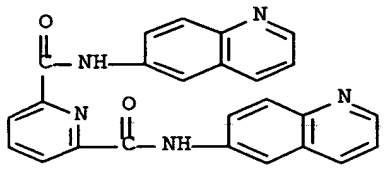
IT **18519-79-4P 737763-41-6P 737763-42-7P**
737763-43-8P 737763-44-9P 737763-47-2P
737763-48-3P 737763-49-4P 737763-51-8P
737763-52-9P 737763-53-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(G-quadruplex-binding quaternary nitrogen-containing heterocyclic compound preparation and use as antitumor agents)
RN 18519-79-4 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-di-6-quinolinyl- (9CI) (CA INDEX NAME)



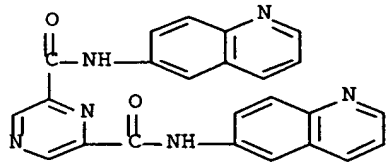
RN 737763-41-6 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N-[4-(dimethylamino)-2-methyl-6-quinolinyl]-N'-6-quinolinyl- (9CI) (CA INDEX NAME)



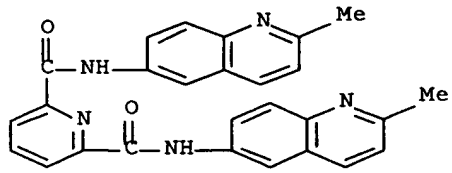
RN 737763-42-7 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N,N'-di-6-quinolinyl- (9CI) (CA INDEX NAME)



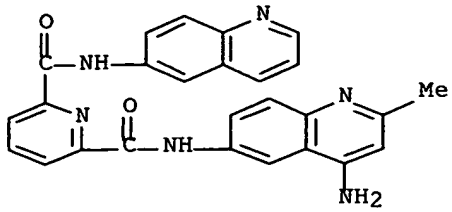
RN 737763-43-8 HCAPLUS
CN 2,6-Pyrazinedicarboxamide, N,N'-di-6-quinolinyl- (9CI) (CA INDEX NAME)



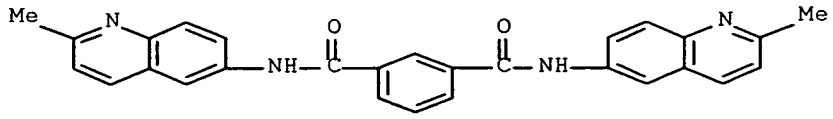
RN 737763-44-9 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N,N'-bis(2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)



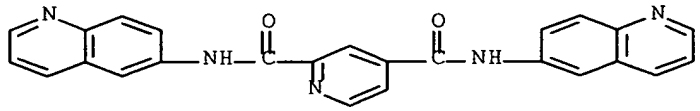
RN 737763-47-2 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N-(4-amino-2-methyl-6-quinolinyl)-N'-6-quinolinyl- (9CI) (CA INDEX NAME)



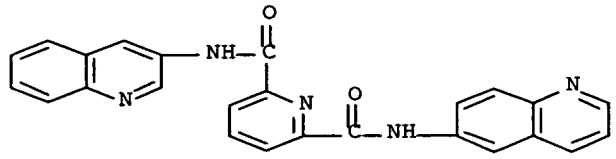
RN 737763-48-3 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)



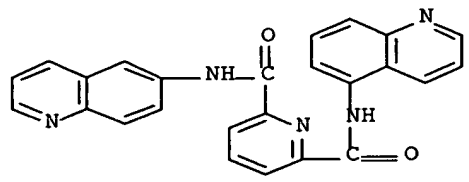
RN 737763-49-4 HCAPLUS
CN 2,4-Pyridinedicarboxamide, N,N'-di-6-quinolinyl- (9CI) (CA INDEX NAME)



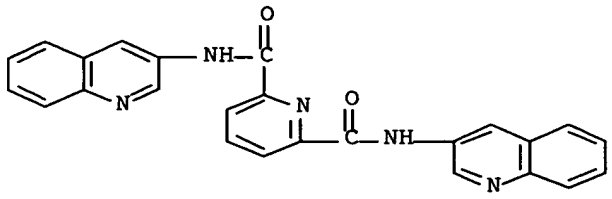
RN 737763-51-8 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N-3-quinolinyl-N'-6-quinolinyl- (9CI) (CA INDEX NAME)



RN 737763-52-9 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N-5-quinolinyl-N'-6-quinolinyl- (9CI) (CA INDEX NAME)



RN 737763-53-0 HCAPLUS
CN 2,6-Pyridinedicarboxamide, N,N'-di-3-quinolinyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:927425 HCAPLUS Full-text
DOCUMENT NUMBER: 138:24646
TITLE: Heterocyclic diamides and related compounds as telomerase inhibitors
INVENTOR(S): Bouchard, Herve; Hittinger, Augustin
PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002096903	A2	20021205	WO 2002-FR1767	20020527
WO 2002096903	A3	20030417		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FR 2825090	A1	20021129	FR 2001-6909	20010528
FR 2825090	B1	20030801		
EP 1401833	A2	20040331	EP 2002-740814	20020527
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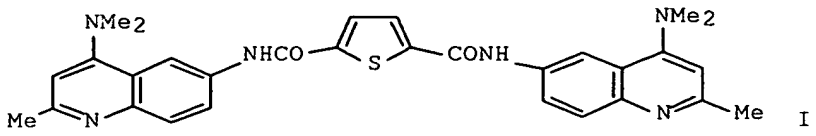
JP 2004534046	T2	20041111	JP 2003-500082	20020527
US 2004138257	A1	20040715	US 2003-721210	20031125

PRIORITY APPLN. INFO.:
FR 2001-6909 A 20010528
FR 2002-1256 A 20020204
WO 2002-FR1767 W 20020527

OTHER SOURCE(S): MARPAT 138:24646
GI

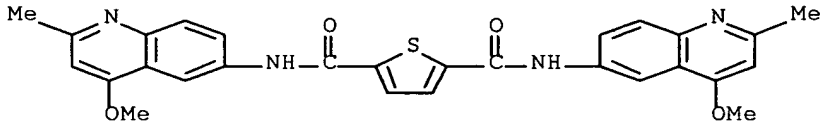


I

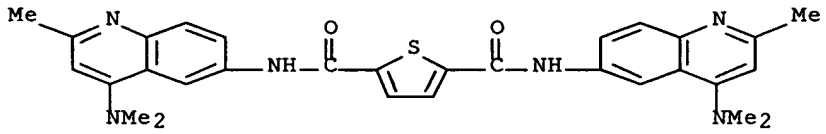
AB Heterocyclic diamides and related compds. were prepared for use as telomerase inhibitors. Thus, 2,5-thiophenedicarboxylic acid was treated with 6-amino-4-dimethylamino-2-methylquinoline to give the diamide I which had a fluorescence Tm of 10.5 at 1 mM and an IC50 for inhibition of telomerase of 0.9 μM.

IT **477219-39-9P 477219-40-2P 477219-41-3P**
477219-44-6P 477219-45-7P 477219-55-9P
477219-57-1P 477219-58-2P 477219-61-7P
477219-62-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(heterocyclic diamides and related compds. as telomerase inhibitors)

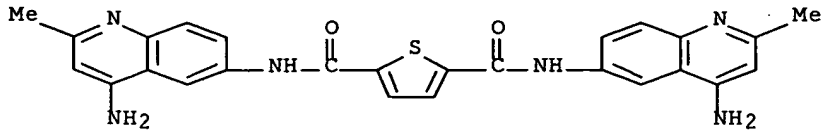
RN 477219-39-9 HCAPLUS
CN 2,5-Thiophenedicarboxamide, N,N'-bis(4-methoxy-2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)



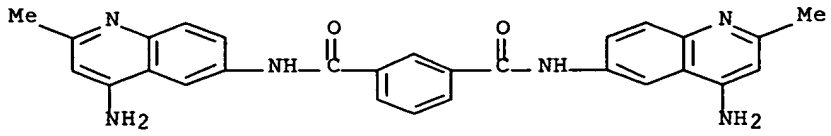
RN 477219-40-2 HCAPLUS
CN 2,5-Thiophenedicarboxamide, N,N'-bis[4-(dimethylamino)-2-methyl-6-quinolinyl]- (9CI) (CA INDEX NAME)



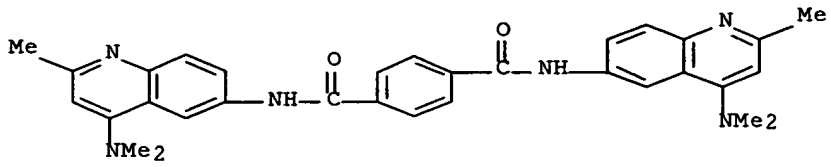
RN 477219-41-3 HCAPLUS
CN 2,5-Thiophenedicarboxamide, N,N'-bis(4-amino-2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)



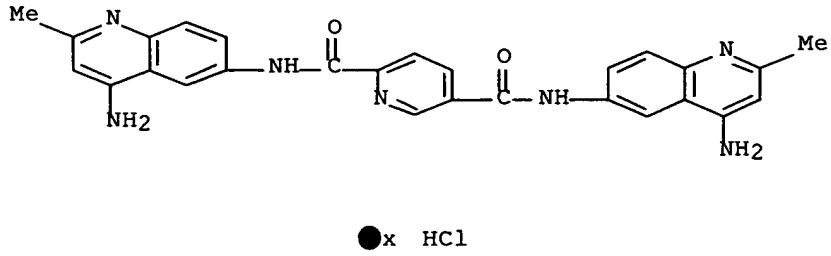
RN 477219-44-6 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(4-amino-2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)



RN 477219-45-7 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis[4-(dimethylamino)-2-methyl-6-quinolinyl]- (9CI) (CA INDEX NAME)

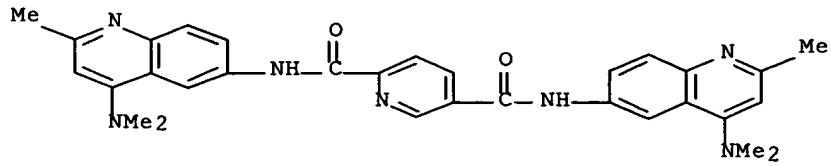


RN 477219-55-9 HCAPLUS
CN 2,5-Pyridinedicarboxamide, N,N'-bis(4-amino-2-methyl-6-quinolinyl)-, hydrochloride (9CI) (CA INDEX NAME)



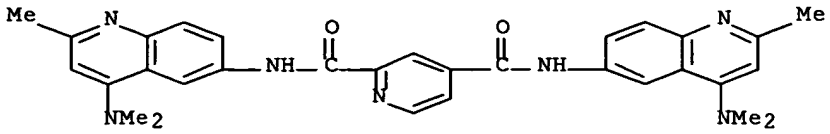
● x HCl

RN 477219-57-1 HCAPLUS
CN 2,5-Pyridinedicarboxamide, N,N'-bis[4-(dimethylamino)-2-methyl-6-quinolinyl]- (9CI) (CA INDEX NAME)



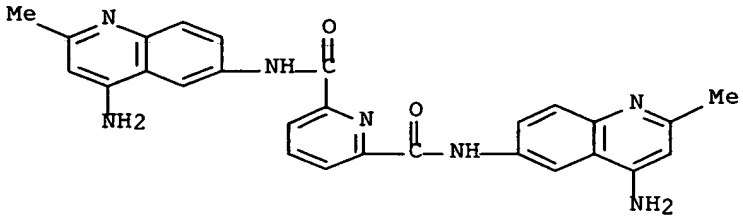
RN 477219-58-2 HCAPLUS

CN 2,4-Pyridinedicarboxamide, N,N'-bis[4-(dimethylamino)-2-methyl-6-quinolinyl]- (9CI) (CA INDEX NAME)



RN 477219-61-7 HCAPLUS

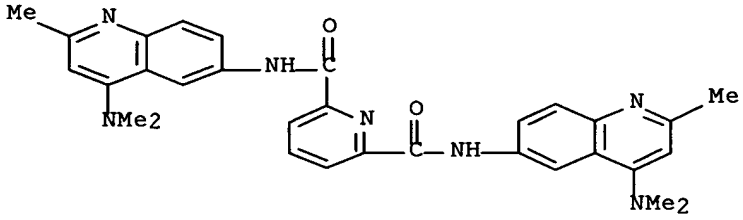
CN 2,6-Pyridinedicarboxamide, N,N'-bis(4-amino-2-methyl-6-quinolinyl)-, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

RN 477219-62-8 HCAPLUS

CN 2,6-Pyridinedicarboxamide, N,N'-bis[4-(dimethylamino)-2-methyl-6-quinolinyl]-, hydrochloride (9CI) (CA INDEX NAME)



●x HCl

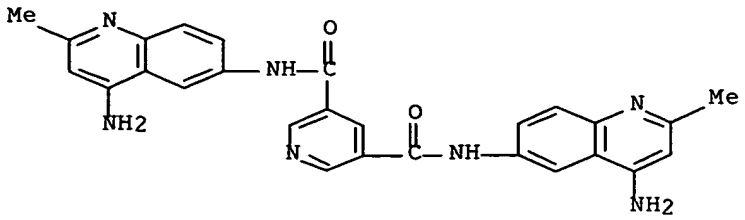
IT **477219-42-4P 477219-43-5P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

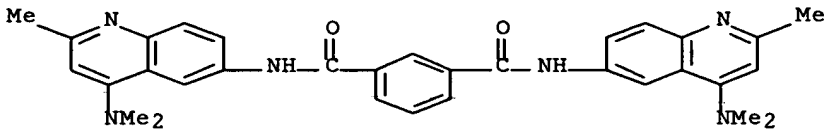
(heterocyclic diamides and related compds. as telomerase inhibitors)

RN 477219-42-4 HCAPLUS

CN 3,5-Pyridinedicarboxamide, N,N'-bis(4-amino-2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)



RN 477219-43-5 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis[4-(dimethylamino)-2-methyl-6-quinolinyl]- (9CI) (CA INDEX NAME)



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E1 THROUGH E74 ASSIGNED

E75 THROUGH E108 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 15:31:40 ON 29 JAN 2005
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DICTIONARY FILE UPDATES: 27 JAN 2005 HIGHEST RN 821767-00-4

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http://www.cas.org/ONLINE/DBSS/registryss.html

=> => d his l41-

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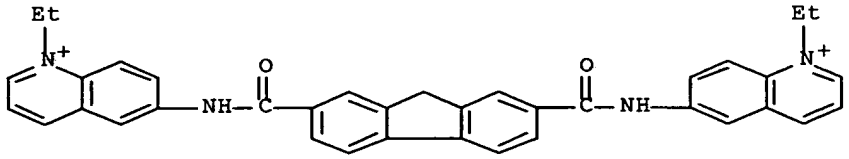
SELECT HIT RN L40 1-2

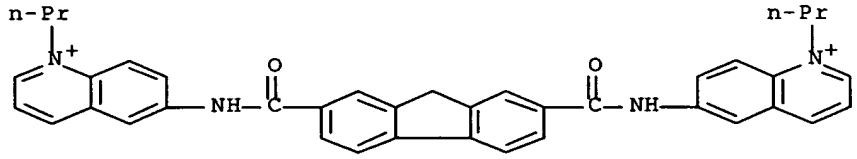
FILE 'REGISTRY' ENTERED AT 15:31:40 ON 29 JAN 2005
L41 107 S E1-E108
L42 56 S L37 NOT L41

=> d ide can l42 1-56

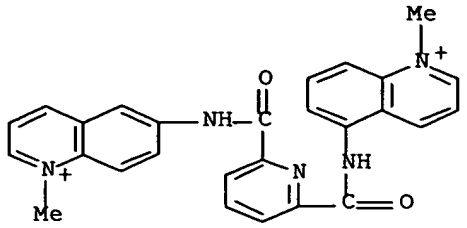
L42 ANSWER 1 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 802860-54-4 REGISTRY
CN Quinolinium, 6,6'-[fluoren-2,7-ylenebis(carbonylimino)]bis[1-ethyl- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C37 H32 N4 O2
CI COM
SR CA



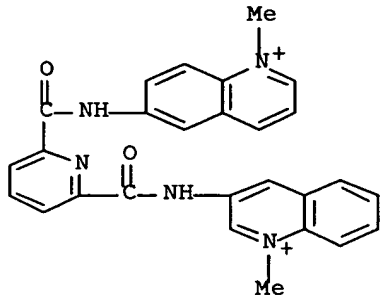
L42 ANSWER 2 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 801176-16-9 REGISTRY
CN Quinolinium, 6,6'-[fluoren-2,7-ylenebis(carbonylimino)]bis[1-propyl- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C39 H36 N4 O2
CI COM
SR CA



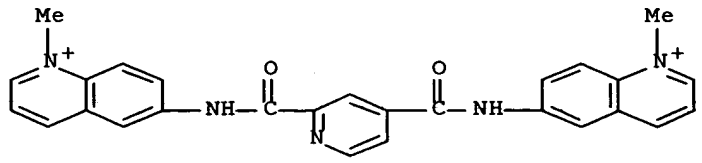
L42 ANSWER 3 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 795259-57-3 REGISTRY
CN Quinolinium, 1-methyl-5-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N5 O2
CI COM
SR CA



L42 ANSWER 4 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-55-2 REGISTRY
CN Quinolinium, 1-methyl-3-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N5 O2
CI COM
SR CA

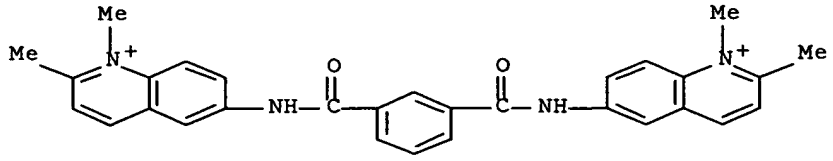


L42 ANSWER 5 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-54-1 REGISTRY
CN Quinolinium, 6,6'-[2,4-pyridinediylbis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N5 O2
CI COM
SR CA

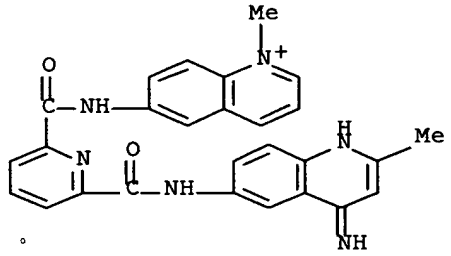


L42 ANSWER 6 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-53-0 REGISTRY
CN Quinolinium, 6,6'-[1,3-phenylenebis(carbonylimino)]bis[1,2-dimethyl- (9CI) (CA INDEX NAME)

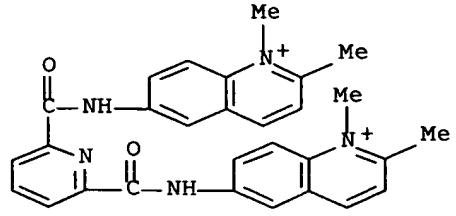
FS 3D CONCORD
MF C30 H28 N4 O2
CI COM
SR CA



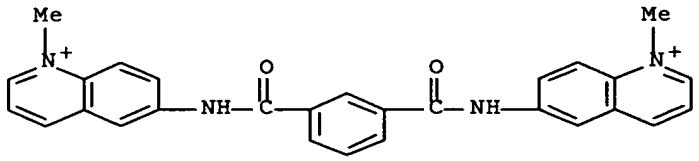
L42 ANSWER 7 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-52-9 REGISTRY
CN Quinolinium, 6-[[[6-[[(1,4-dihydro-4-imino-2-methyl-6-quinolinyl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]-1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N6 O2
CI COM
SR CA



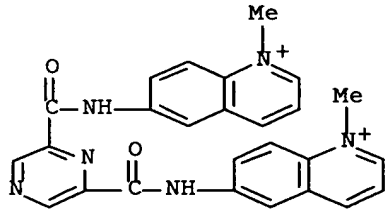
L42 ANSWER 8 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-51-8 REGISTRY
CN Quinolinium, 6,6'-[2,6-pyridinediylbis(carbonylimino)]bis[1,2-dimethyl-(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H27 N5 O2
CI COM
SR CA



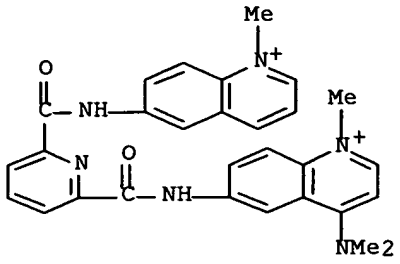
L42 ANSWER 9 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-50-7 REGISTRY
CN Quinolinium, 6,6'-[1,3-phenylenebis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C28 H24 N4 O2
CI COM
SR CA



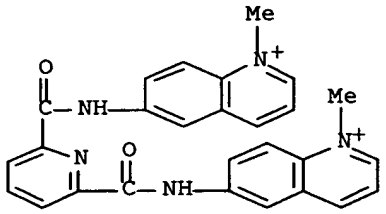
L42 ANSWER 10 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-49-4 REGISTRY
CN Quinolinium, 6,6'-[2,6-pyrazinediylbis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 N6 O2
CI COM
SR CA



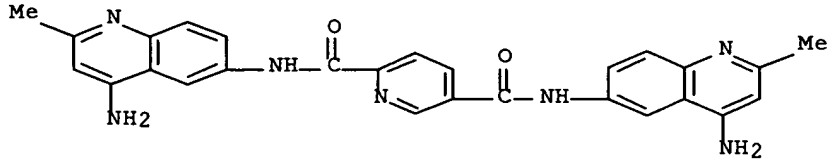
L42 ANSWER 11 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-48-3 REGISTRY
CN Quinolinium, 4-(dimethylamino)-1-methyl-6-[[[6-[[(1-methylquinolinium-6-yl)amino]carbonyl]-2-pyridinyl]carbonyl]amino]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H28 N6 O2
CI COM
SR CA



L42 ANSWER 12 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 794458-47-2 REGISTRY
CN Quinolinium, 6,6'-[2,6-pyridinediylbis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N5 O2
CI COM
SR CA



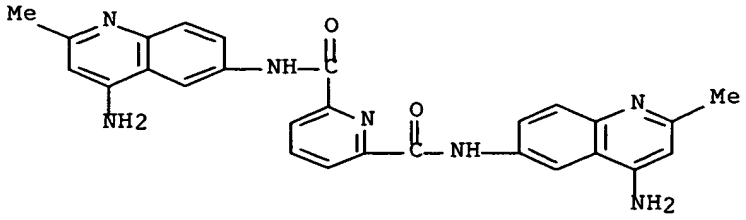
L42 ANSWER 13 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 792902-07-9 REGISTRY
CN 2,5-Pyridinedicarboxamide, N,N'-bis(4-amino-2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N7 O2
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

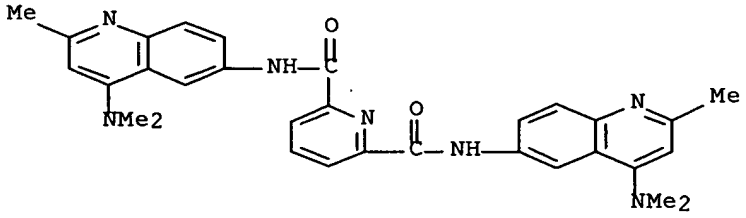
L42 ANSWER 14 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 770704-51-3 REGISTRY

CN 2,6-Pyridinedicarboxamide, N,N'-bis(4-amino-2-methyl-6-quinolinyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N7 O2
CI COM
SR CA

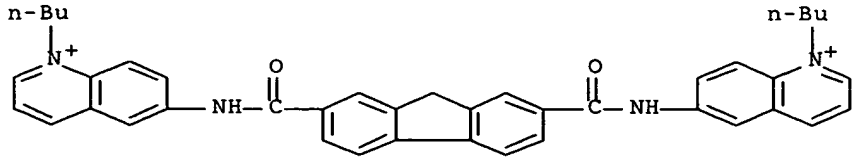


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L42 ANSWER 15 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 752979-06-9 REGISTRY
CN 2,6-Pyridinedicarboxamide, N,N'-bis[4-(dimethylamino)-2-methyl-6-quinolinyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C31 H31 N7 O2
CI COM
SR CA

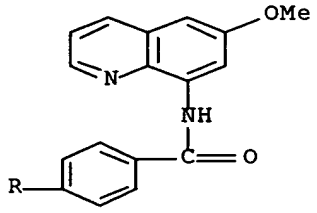


L42 ANSWER 16 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 737694-58-5 REGISTRY
CN Quinolinium, 6,6'-[9H-fluorene-2,7-diylbis(carbonylimino)]bis[1-butyl-(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C41 H40 N4 O2
CI COM
SR CA

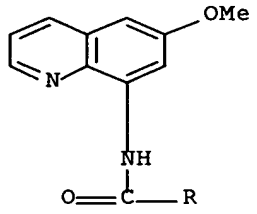


L42 ANSWER 17 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 500355-85-1 REGISTRY
CN 1,4-Benzenedicarboxamide, N,N'-bis(6-methoxy-8-quinolinyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN NSC 111336
FS 3D CONCORD
MF C28 H22 N4 O4
SR Chemical Library

PAGE 1-A

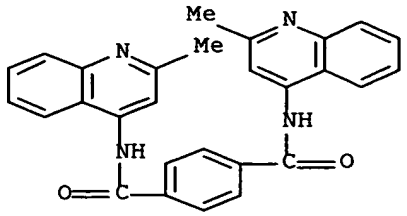


PAGE 2-A



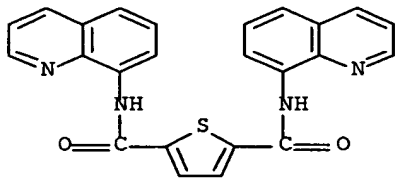
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L42 ANSWER 18 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 500350-75-4 REGISTRY
CN 1,4-Benzenedicarboxamide, N,N'-bis(2-methyl-4-quinolinyl)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN NSC 110318
FS 3D CONCORD
MF C28 H22 N4 O2
SR Chemical Library



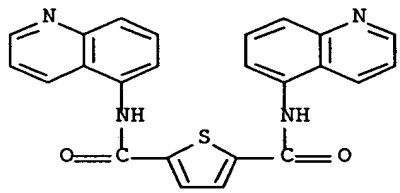
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L42 ANSWER 19 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 452366-12-0 REGISTRY
CN 2,5-Thiophenedicarboxamide, N,N'-di-8-quinolinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H16 N4 O2 S
SR Chemical Library
LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

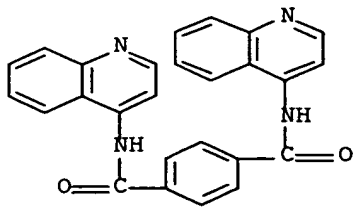
L42 ANSWER 20 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 452366-11-9 REGISTRY
CN 2,5-Thiophenedicarboxamide, N,N'-di-5-quinolinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H16 N4 O2 S
SR Chemical Library
LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

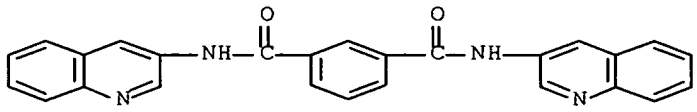
L42 ANSWER 21 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN

RN 413612-53-0 REGISTRY
CN 1,4-Benzenedicarboxamide, N,N'-di-4-quinolinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H18 N4 O2
SR Chemical Library
LC STN Files: CHEMCATS



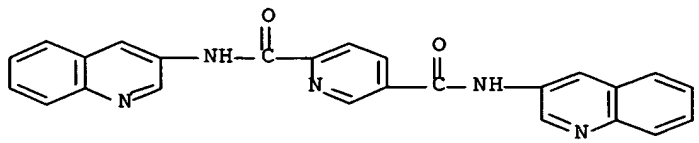
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L42 ANSWER 22 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 313666-94-3 REGISTRY
CN 1,3-Benzenedicarboxamide, N,N'-di-3-quinolinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H18 N4 O2
SR Chemical Library
LC STN Files: CHEMCATS



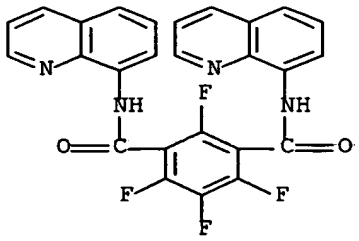
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L42 ANSWER 23 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 313548-64-0 REGISTRY
CN 2,5-Pyridinedicarboxamide, N,N'-di-3-quinolinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H17 N5 O2
SR Chemical Library
LC STN Files: CHEMCATS



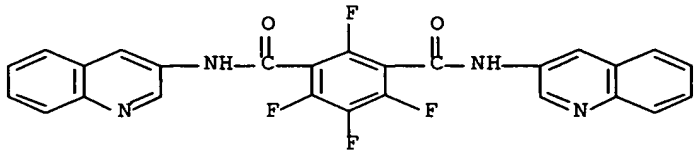
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L42 ANSWER 24 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 304885-03-8 REGISTRY
CN 1,3-Benzenedicarboxamide, 2,4,5,6-tetrafluoro-N,N'-di-8-quinolinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H14 F4 N4 O2
SR Chemical Library
LC STN Files: CHEMCATS



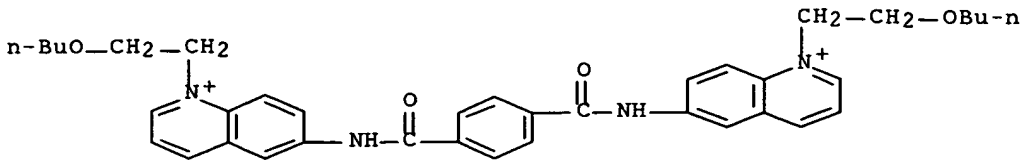
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L42 ANSWER 25 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 304885-02-7 REGISTRY
CN 1,3-Benzenedicarboxamide, 2,4,5,6-tetrafluoro-N,N'-di-3-quinolinyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H14 F4 N4 O2
SR Chemical Library
LC STN Files: CHEMCATS

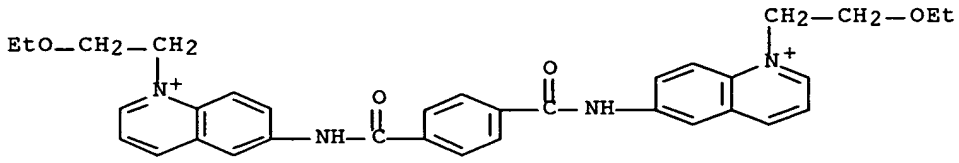


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

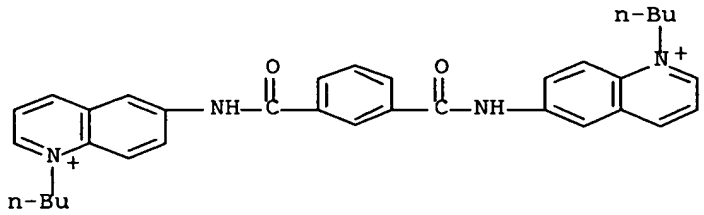
L42 ANSWER 26 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50570-07-5 REGISTRY
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-butoxyethyl)-(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C38 H44 N4 O4
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



L42 ANSWER 27 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50569-65-8 REGISTRY
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1-(2-ethoxyethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H36 N4 O4
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)

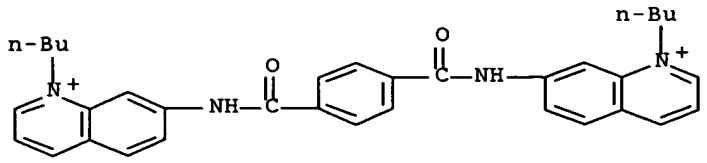


L42 ANSWER 28 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50569-49-8 REGISTRY
CN Quinolinium, 6,6'-[1,3-phenylenebis(carbonylimino)]bis[1-butyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H36 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)

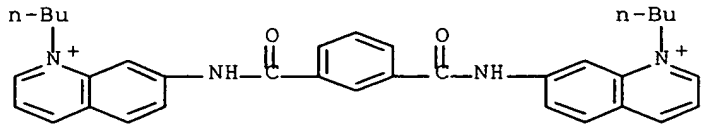


L42 ANSWER 29 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50569-47-6 REGISTRY
CN Quinolinium, 7,7'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H36 N4 O2

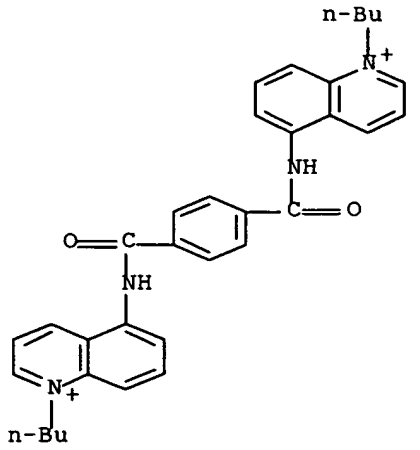
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



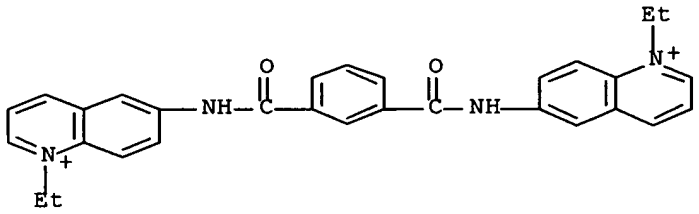
L42 ANSWER 30 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50569-46-5 REGISTRY
CN Quinolinium, 7,7'-[1,3-phenylenebis(carbonylimino)]bis[1-butyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H36 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



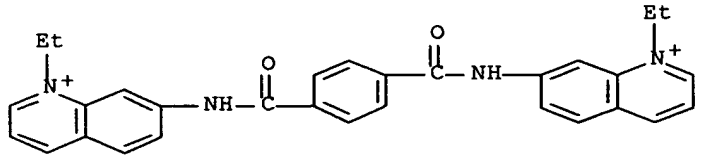
L42 ANSWER 31 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50569-42-1 REGISTRY
CN Quinolinium, 5,5'-[1,4-phenylenebis(carbonylimino)]bis[1-butyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Quinolinium, 5,5'-(terephthaloyldiimino)bis[1-butyl- (8CI)
FS 3D CONCORD
DR 14106-86-6
MF C34 H36 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



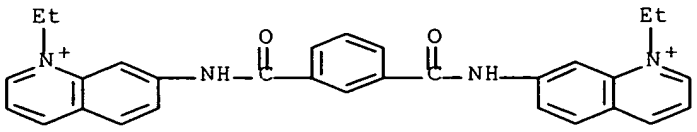
L42 ANSWER 32 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50568-78-0 REGISTRY
CN Quinolinium, 6,6'-[1,3-phenylenebis(carbonylimino)]bis[1-ethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H28 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



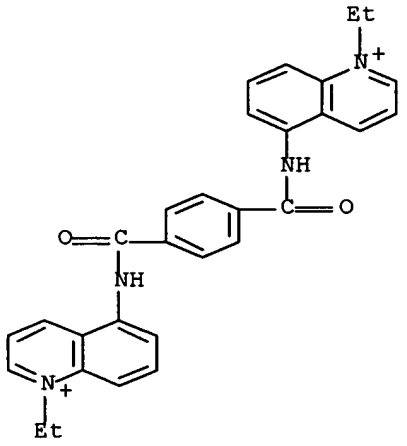
L42 ANSWER 33 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50568-77-9 REGISTRY
CN Quinolinium, 7,7'-[1,4-phenylenebis(carbonylimino)]bis[1-ethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H28 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



L42 ANSWER 34 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50568-76-8 REGISTRY
CN Quinolinium, 7,7'-[1,3-phenylenebis(carbonylimino)]bis[1-ethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H28 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)

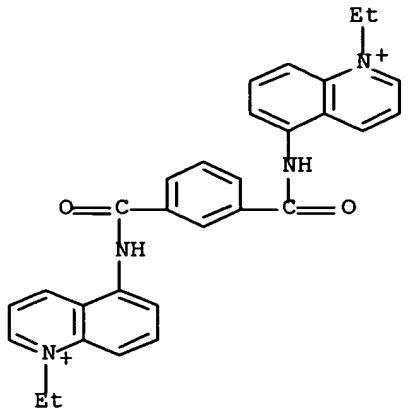


L42 ANSWER 35 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50568-74-6 REGISTRY
CN Quinolinium, 5,5'-[1,4-phenylenebis(carbonylimino)]bis[1-ethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H28 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)

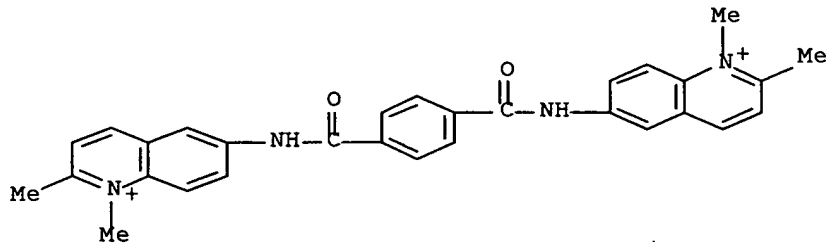


L42 ANSWER 36 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50568-73-5 REGISTRY
CN Quinolinium, 5,5'-[1,3-phenylenebis(carbonylimino)]bis[1-ethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H28 N4 O2
CI COM
LC STN Files: BEILSTEIN*

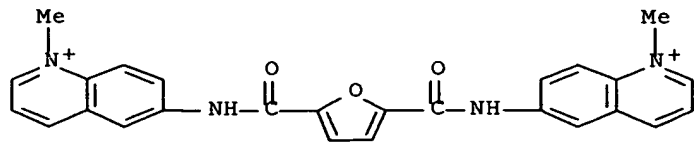
(*File contains numerically searchable property data)



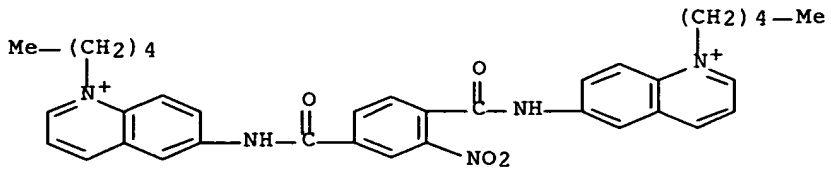
L42 ANSWER 37 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50568-01-9 REGISTRY
CN Quinolinium, 6,6'-[1,4-phenylenebis(carbonylimino)]bis[1,2-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H28 N4 O2
CI COM



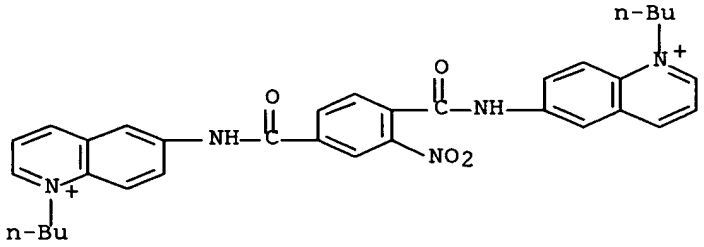
L42 ANSWER 38 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 50567-60-7 REGISTRY
CN Quinolinium, 6,6'-[2,5-furandiylbis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
DR 50567-91-4
MF C26 H22 N4 O3
CI COM



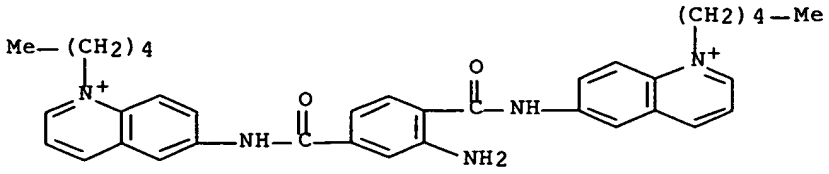
L42 ANSWER 39 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47858-54-8 REGISTRY
CN Quinolinium, 6,6'-[(2-nitro-1,4-phenylene)bis(carbonylimino)]bis[1-pentyl-
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C36 H39 N5 O4
CI COM



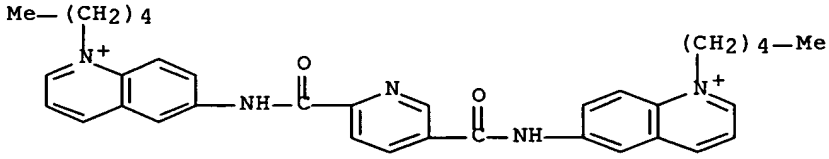
L42 ANSWER 40 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47845-76-1 REGISTRY
CN Quinolinium, 6,6'-[(2-nitro-1,4-phenylene)bis(carbonylimino)]bis[1-butyl-
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H35 N5 O4
CI COM



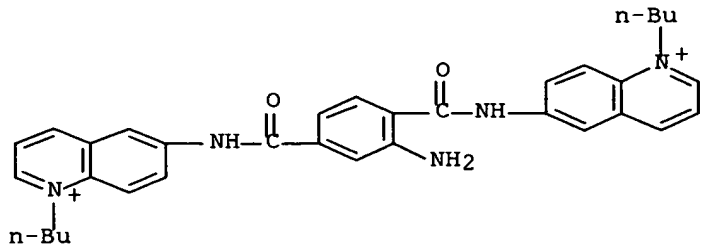
L42 ANSWER 41 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47845-75-0 REGISTRY
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-pentyl-
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C36 H41 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



L42 ANSWER 42 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47834-40-2 REGISTRY
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-pentyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C35 H39 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)

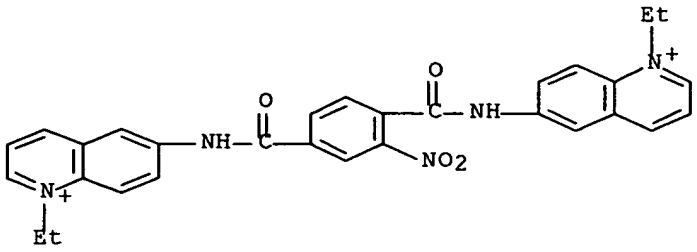


L42 ANSWER 43 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47827-75-8 REGISTRY
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-butyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H37 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)

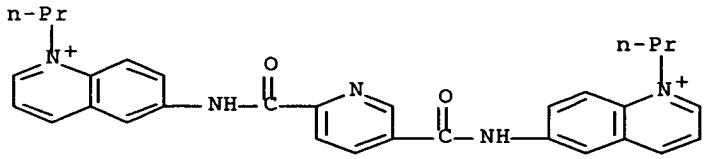


L42 ANSWER 44 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47812-61-3 REGISTRY
CN Quinolinium, 6,6'-[(2-nitro-1,4-phenylene)bis(carbonylimino)]bis[1-ethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H27 N5 O4

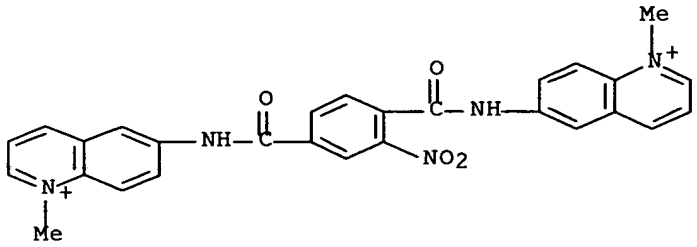
CI COM



L42 ANSWER 45 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47801-67-2 REGISTRY
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-propyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C31 H31 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)

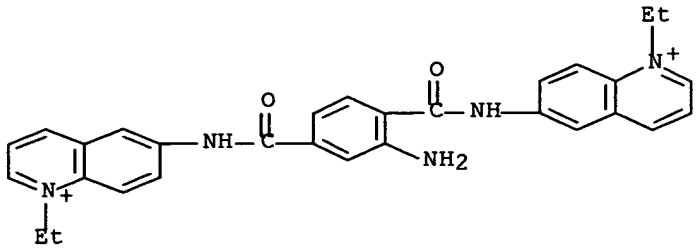


L42 ANSWER 46 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47793-44-2 REGISTRY
CN Quinolinium, 6,6'-[(2-nitro-1,4-phenylene)bis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C28 H23 N5 O4
CI COM

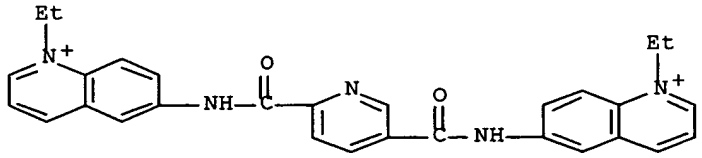


L42 ANSWER 47 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47792-83-6 REGISTRY
CN Quinolinium, 6,6'-[(2-amino-1,4-phenylene)bis(carbonylimino)]bis[1-ethyl-

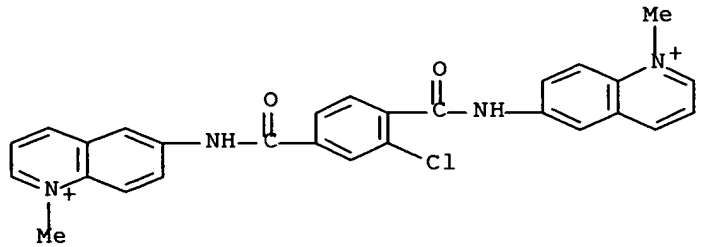
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H29 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



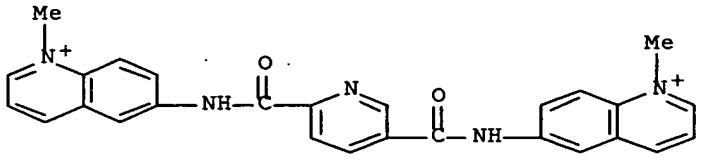
L42 ANSWER 48 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47776-45-4 REGISTRY
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-ethyl- (9CI)
(CA INDEX NAME)
FS 3D CONCORD
MF C29 H27 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



L42 ANSWER 49 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47766-43-8 REGISTRY
CN Quinolinium, 6,6'-[(2-chloro-1,4-phenylene)bis(carbonylimino)]bis[1-methyl-
(9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C28 H23 Cl N4 O2
CI COM



L42 ANSWER 50 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 47749-41-7 REGISTRY
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-methyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



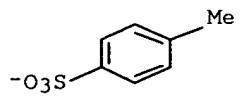
L42 ANSWER 51 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 14242-17-2 REGISTRY
CN Quinolinium, 5,5'-[1,3-phenylenebis(carbonylimino)]bis[1-butyl-, salt with 4-methylbenzenesulfonic acid (1:2), monohydrate (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Quinolinium, 5,5'-(isophthaloyldiimino)bis[1-butyl-, di-p-toluenesulfonate, monohydrate (8CI)
MF C34 H36 N4 O2 . 2 C7 H7 O3 S . H2 O

CM 1

CRN 18519-78-3
CMF C34 H36 N4 O2 . 2 C7 H7 O3 S

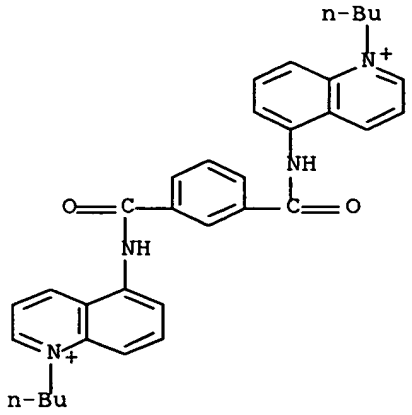
CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

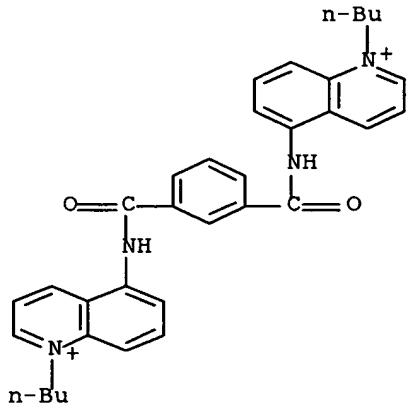


CM 3

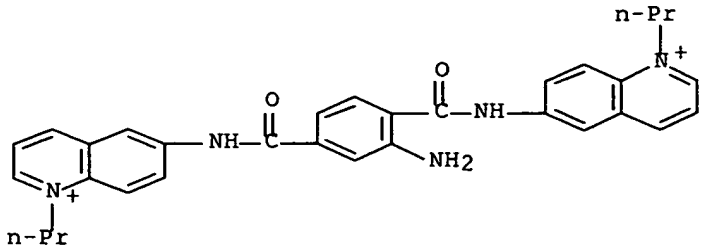
CRN 14106-87-7
CMF C34 H36 N4 O2



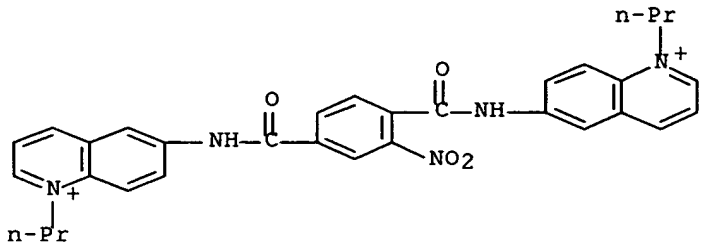
L42 ANSWER 52 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 14106-87-7 REGISTRY
CN Quinolinium, 5,5'-(isophthaloyldiimino)bis[1-butyl- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H36 N4 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



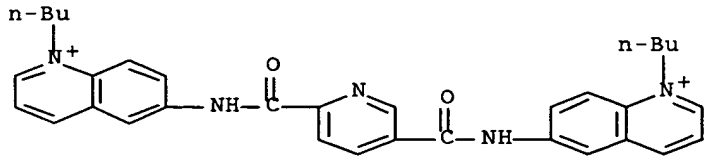
L42 ANSWER 53 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 14106-85-5 REGISTRY
CN Quinolinium, 6,6'-[(2-aminoterephthaloyl)diimino]bis[1-propyl- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H33 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



L42 ANSWER 54 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 14106-84-4 REGISTRY
CN Quinolinium, 6,6'-[(2-nitroterephthaloyl)diimino]bis[1-propyl- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H31 N5 O4
CI COM

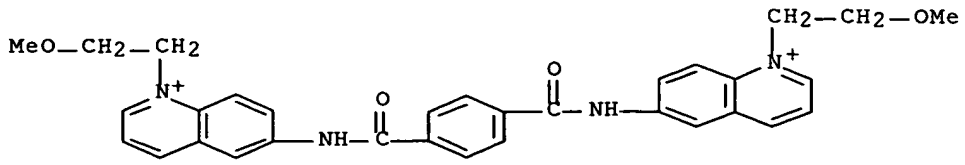


L42 ANSWER 55 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 14106-83-3 REGISTRY
CN Quinolinium, 6,6'-[2,5-pyridinediylbis(carbonylimino)]bis[1-butyl- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C33 H35 N5 O2
CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



L42 ANSWER 56 OF 56 REGISTRY COPYRIGHT 2005 ACS on STN
RN 14106-79-7 REGISTRY
CN Quinolinium, 6,6'-(terephthaloyldiimino)bis[1-(2-methoxyethyl)- (8CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H32 N4 O4

CI COM
LC STN Files: BEILSTEIN*
(*File contains numerically searchable property data)



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